

UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH DAKOTA
SOUTHERN DIVISION

BUERGOFOL GMBH, Plaintiff and Counter Defendant, vs. OMEGA LINER COMPANY, INC., Defendant and Counter Claimant.	4:22-CV-04112-KES
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**OMEGA’S FIRST AMENDED ANSWER, DEFENSES, COUNTERCLAIMS TO
BUERGOFOL’S FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT,
AND DEMAND FOR JURY**

Omega Liner Company, Inc. (“Omega”), by and through the undersigned attorneys, for its answer, defenses and counterclaims to Buergofol GmbH’s (“Buergofol”) *First Amended Complaint for Patent Infringement* (“FAC”), states as follows. Except as hereinafter specifically admitted, qualified, or affirmatively alleged, Omega denies each and every allegation, matter, or thing contained in Buergofol’s First Amended Complaint.

PARTIES

1. Responding to Paragraph 1, Omega lacks knowledge or information sufficient to form a belief as to the allegations set forth in Paragraph 1, and on that basis denies the same.

2. Responding to Paragraph 2, Omega admits that Omega is a South Dakota corporation with its principal place of business located in Lincoln County at 515 Noid Road,

Canton, South Dakota 57103. Omega admits that it is engaged in the business of manufacturing and selling cured-in-place pipe liners for pipe renovation. Omega denies the remaining allegations of Paragraph 2.

JURISDICTION AND VENUE

3. Responding to Paragraph 3, Omega acknowledges that Buergofol purports to allege claims of patent infringement under the patent laws of the United States, Title 35, United States Code. Omega denies all allegations of wrongdoing, and that Buergofol is entitled to any recovery.

4. Responding to Paragraph 4, Paragraph 4 merely purports to set forth a legal conclusion to which no response is required. Alternatively, to the extent a response is necessary Omega admits the issue of subject matter jurisdiction.

5. Responding to Paragraph 5, Omega admits it maintains a principal place of business in, and thus resides in, the District of South Dakota.

6. Responding to Paragraph 6, Omega admits that it has a regular and established place of business in the District of South Dakota. Omega denies the remaining allegations of Paragraph 6.

7. Responding to Paragraph 7, Omega admits that personal jurisdiction exists, and that venue is proper in this court. Omega denies the remaining allegations of Paragraph 7.

U.S. PATENT NO. 9,657,882

8. Responding to Paragraph 8, Omega admits that U.S. Patent No. 9,657,882 (“the ‘882 Patent”) appears to be attached as Exhibit A to the FAC, and that it purports to be entitled “Tubular Film and the Use Thereof,” purports to have issued on May 23, 2017, and purports that the inventors are Kurt Stark, Gregor Schleicher, and Abdel-Kader Boutrid. Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations set forth in Paragraph 8, and on that basis denies the same.

9. Responding to Paragraph 9, Omega admits that 35 U.S.C. § 282 states “[a] patent shall be presumed valid.” Omega denies that the ’882 Patent is valid or enforceable.

10. Responding to Paragraph 10, Omega is without knowledge or information sufficient to form a belief as to the allegations of Paragraph 10, and on that basis denies the same.

11. Responding to Paragraph 11, Omega is unable to discern the source of the information alleged in Paragraph 11 or whether Buergofol alleges that the information included in Paragraph 11 represents or summarizes representations made in the ’882 Patent. To the extent Buergofol intends Paragraph 11 to summarize representations in the ’882 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 11, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 11.

12. Responding to Paragraph 12, Omega denies that the figure in Paragraph 12 is an accurate replication of Figure 1 of the ’882 Patent. Omega is unable to discern the source of the information alleged in Paragraph 12 or whether Buergofol alleges that the information included in Paragraph 12 represents or summarizes representations made in the ’882 Patent. To the extent Buergofol intends Paragraph 12 to summarize representations in the ’882 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 12, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 12.

13. Responding to Paragraph 13, Omega is unable to discern the source of the information alleged in Paragraph 13 or whether Buergofol alleges that the information included in

Paragraph 13 represents or summarizes representations made in the '882 Patent. To the extent Buergofol intends Paragraph 13 to summarize representations in the '882 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 13, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 13.

14. Responding to Paragraph 14, Omega is unable to discern the source of the information alleged in Paragraph 14 or whether Buergofol alleges that the information included in Paragraph 14 represents or summarizes representation made in the '882 Patent. To the extent Buergofol intends Paragraph 14 to summarize representations in the '882 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 14, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 14.

15. Responding to Paragraph 15, Omega is unable to discern the source of the information alleged in Paragraph 15 or whether Buergofol alleges that the information included in Paragraph 15 represents or summarizes representation made in the '882 Patent. To the extent Buergofol intends Paragraph 15 to summarize representations in the '882 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 15, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 15.

U.S. PATENT NO. 8,794,269

16. Responding to Paragraph 16, Omega admits that U.S. Patent No. 8,794,269 (“the ’269 Patent”) appears to be attached as Exhibit B to the FAC, that it purports to be titled “Multi-Layer Film Permeable To UV Radiation,” purports to have issued on August 5, 2014, and purports that the sole inventor is Henrik Hummel. Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations set forth in Paragraph 16, and on that basis denies the same.

17. Responding to Paragraph 17, Omega admits that 35 U.S.C. § 282 states “[a] patent shall be presumed valid.” Omega denies that the ’269 Patent is valid or enforceable.

18. Responding to Paragraph 18, Omega is without knowledge or information sufficient to form a belief as to the allegations of Paragraph 18, and, on that basis, denies the same.

19. Responding to Paragraph 19, Omega admits that Paragraph 19 includes a replicated copy of Fig. 1 of the ’269 Patent. As for the remaining allegations of Paragraph 19, Omega is unable to discern the source of the information or whether Buergofol alleges that the information included in Paragraph 19 represents or summarizes representations made in the ’269 Patent. To the extent Buergofol intends Paragraph 19 to summarize representations in the ’269 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 19, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 19.

20. Responding to Paragraph 20, Omega is unable to discern the source of the information alleged in Paragraph 20 or whether Buergofol alleges that the information included in Paragraph 20 represents or summarizes representations made in the ’269 Patent. To the extent Buergofol intends Paragraph 20 to summarize representations in the ’269 Patent, Omega responds

that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 20, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 20.

21. Responding to Paragraph 21, Omega is unable to discern the source of the information alleged in Paragraph 21 or whether Buergofol alleges that the information included in Paragraph 21 represents or summarizes representations made in the '269 Patent. To the extent Buergofol intends Paragraph 21 to summarize representations in the '269 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 21, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 21.

22. Responding to Paragraph 22, Omega is unable to discern the source of the information alleged in Paragraph 22 or whether Buergofol alleges that the information included in Paragraph 22 represents or summarizes representations made in the '269 Patent. To the extent Buergofol intends Paragraph 22 to summarize representations in the '269 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 22, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 22.

23. Responding to Paragraph 23, Omega is unable to discern the source of the information alleged in Paragraph 23 or whether Buergofol alleges that the information included in Paragraph 23 represents or summarizes representations made in the '269 Patent. To the extent

Buergofol intends Paragraph 23 to summarize representations in the '269 Patent, Omega responds that the patent document speaks for itself. To the extent Buergofol intends something else by Paragraph 23, Omega is without sufficient knowledge or information to admit or deny the representations and assertions therein, and, on that basis, Omega denies the allegations in Paragraph 23.

BUERGOFOL'S FACTUAL BACKGROUND

24. Responding to Paragraph 24, Omega admits that it has sold and/or continues to sell, offer for sale and manufacture an ultraviolet cured-in-place pipe (CIPP) lining sometimes referred to as the "Omega Liner," which has an inner film, an external film, and a carrier material (between the inner and external films) that contains a reactive resin. Omega denies the remaining allegations of Paragraph 24.

25. Responding to Paragraph 25, Omega admits that it has manufactured its liners at its facility in Canton, South Dakota. Omega denies the remaining allegations of Paragraph 25.

26. Responding to Paragraph 26, Omega denies the allegations of Paragraph 26.

27. Responding to Paragraph 27, Omega admits that it makes and sells a 10-inch diameter UV CIPP liner that has an orange external tubular film, a fleece layer, a carrier or support material layer that is impregnated with a reactive resin, and an inner tubular film. Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations set forth in Paragraph 27, and, on that basis, denies the same.

28. Responding to Paragraph 28, Omega lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 28, and, on that basis, denies the same.

29. Responding to Paragraph 29, Omega admits that Exhibit E is entitled "Omega-Liner™ Product Information 2021," and that Exhibit C is entitled "Omega Liner Company Liner Installation Manual." Omega further alleges that the documents speak for themselves. Omega

lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 29, and, on that basis, denies the same.

30. Responding to Paragraph 30, Omega lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 30, and, on that basis, denies the same.

31. Responding to Paragraph 31, Omega lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 31, and, on that basis, denies the same.

32. Responding to Paragraph 32, Omega denies that the allegations of Paragraph 32.

COUNT I
(Alleged Infringement of U.S. Patent No. 9,657,882)

33. Responding to Paragraph 33, Omega incorporates its responses and denials to Paragraphs 1-32 as if set forth completely herein.

34. Responding to Paragraph 34, Omega denies the allegations of Paragraph 34.

35. Responding to Paragraph 35, Omega denies the allegations of Paragraph 35.

36. Responding to Paragraph 36, Omega admits that the preamble of claim 1 of the '882 Patent says an "insertion tube for use in trenchless sewage pipe renovation." Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 36, and, on that basis, denies the same.

37. Responding to Paragraph 37, Omega admits that claim 1 of the '882 Patent recites, *in part only*, "an inner tubular film," "a carrier material" that is "impregnated with a reactive plastic resin," and "an opaque external tubular film." Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 37, and, on that basis, denies the same.

38. Responding to Paragraph 38, Omega admits that claim 1 of the '882 Patent, *in part only*, recites "an opaque external tubular film that is impermeable to liquids and at least partially reflects or absorbs UV radiation or visible light of short wavelengths." Omega lacks knowledge

or information sufficient to form a belief as to the remaining allegations of Paragraph 38, and, on that basis, denies the same.

39. Responding to Paragraph 39, Omega admits that claim 1 of the '882 Patent, *in part only*, recites “a carrier material impregnated with a reactive plastic resin arranged between the external tubular film and the inner tubular film.” Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 39, and, on that basis, denies the same.

40. Responding to Paragraph 40, Omega denies that claim 1 of the '882 Patent recites that the “inner tubular film” comprises all of one or multiple layers, an inner facing external side, an outer facing external side, and a “coating.” Omega admits that claim 1 of the '882 Patent recites, *in part only*, that the claim includes a “coating” and that the coating is “at least one of (1) a coating with a polysiloxane, or (2) a coating or covering with at least one migrating compound” where the coating “is applied over a section or an entire circumferential area of the outer facing external side facing the carrier material.” Omega further alleges that the construction and meaning of the term “migrating compound” as used in claim 1 is a question of law for which no answer is required. To the extent that an answer is required, Omega denies each and every allegation in Paragraph 40 to the extent it purports to allege the construction or meaning of the term “migrating compound.” Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 40, and, on that basis, denies the same.

41. Responding to Paragraph 41, Omega denies the allegations of Paragraph 41.

42. Responding to Paragraph 42, Omega denies the allegations of Paragraph 42.

43. Responding to Paragraph 43, Omega denies that the requirements of 35 U.S.C. § 287 have been complied with. Omega further denies that no owner of the '882 Patent licensed the

'882 Patent to anyone. Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations set forth in Paragraph 43, and, on that basis, denies the same.

COUNT II
(Alleged Infringement of U.S. Patent No. 8,794,269)

44. Responding to Paragraph 44, Omega incorporates its responses and denials to Paragraphs 1-32 as if set forth completely herein.

45. Responding to Paragraph 45, Omega denies the allegations of Paragraph 45.

46. Responding to Paragraph 46, Omega denies the allegations of Paragraph 46.

47. Responding to Paragraph 47, Omega admits that the preamble of claim 1 of the '269 Patent states, *in part only*, "An insertion tube suitable for the renovation of subterranean pipes, optionally subterranean sewer pipes." Omega denies the remaining allegations of Paragraph 47.

48. Responding to Paragraph 48, Omega admits that claim 1 of the '269 Patent recites, *in part only* an "internally situated tube," a "support material" with "a reactive synthetic resin," and an "externally situated single- or multilayer tubular film." Omega denies the remaining allegation of Paragraph 48.

49. Responding to Paragraph 49, Omega admits that claim 1 of the '269 Patent recites, *in part only*, "An insertion tube suitable for the renovation of subterranean pipes, optionally subterranean sewer pipes, comprising an optionally nonconditioned multilayer film that is impermeable to liquids and that is at least to some extent permeable to UV radiation." Omega denies the remaining allegations of Paragraph 49.

50. Responding to Paragraph 50, Omega admits that claim 1 of the '269 Patent recites, *in part only*, "a layer sequence made of (a) a layer (a) comprised of at least one thermoplastic

olefin homo- or copolymer, as one of the external layers, (b) an adhesive-promoter layer (b), (c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide, (d) an adhesive-promoter layer (d), and (e) a layer (e) comprised of at least one homo- and/or copolyamide, as one of the external layers, in the form of a tubular film.” Omega lacks knowledge or information sufficient to form a belief as to the allegation that “the inner tubular film of the 10-inch-diameter Omega Liner was tested and determined to be a three-layer film with the structure PA/AP/PE (where PA denotes polyamide, AP denotes adhesion promoter, and PE denotes polyethylene),” and, on that basis, denies the same. Omega denies the remaining allegations of Paragraph 50.

51. Responding to Paragraph 51, Omega denies the allegations of Paragraph 51.

52. Responding to Paragraph 52, Omega admits that claim 1 of the '269 Patent recites, *in part only*, that “the VICAT softening point of the thermoplastic olefin homo- or copolymer of the layer (a) is at least 100° C.” Omega lacks knowledge or information sufficient to form a belief as to the allegation that “The VICAT softening point of the thermoplastic layer of the inner tubular film of the 10-inch-diameter Omega Liner (pictured above in paragraph 27) was tested by Buergofol and determined to be greater than one hundred degrees Celsius,” and, on that basis, denies the same. Omega denies the remaining allegations of Paragraph 52.

53. Responding to Paragraph 53, Omega admits that claim 1 of the '269 Patent recites, *in part only*, “an externally situated single- or multilayer tubular film which is impermeable to liquids, and which reflects and/or absorbs UV radiation and/or short-wave, visible light, as externally situated tube.” Omega lacks knowledge or information sufficient to form a belief as to “the 10-inch-diameter Omega Liner” that Buergofol alleges it tested, and, on that basis, denies all

allegations in Paragraph 53 related to the same. Omega denies the remaining allegations of Paragraph 53.

54. Responding to Paragraph 54, Omega admits that claim 1 of the '269 Patent recites, *in part only*, “a support material situated therebetween and saturated with a reactive synthetic resin.” Omega admits that page 4 of Exhibit E lists “Unsaturated Polyester” and “Vinyl Ester” as the “Resin System(s)” of the Omega liner, and that page 7 of Exhibit E lists “UV-curing: UV-initiators” for “Curing agents” of the Omega liner. Omega denies the remaining allegations of Paragraph 54.

55. Responding to Paragraph 55, Omega denies the allegations of Paragraph 55.

56. Responding to Paragraph 56, Omega denies the allegations of Paragraph 56.

57. Responding to Paragraph 57, Omega denies that the requirements of 35 U.S.C. § 287 have been complied with. Omega further denies that no owner of the '269 Patent licensed the '269 Patent to anyone. Omega lacks knowledge or information sufficient to form a belief as to the remaining allegations set forth in Paragraph 57, and, on that basis, denies the same.

BUERGOFOL'S PRAYER FOR RELIEF

58. Buergofol's FAC recites a prayer for relief to which no response is required. To the extent any response is required, Omega denies that Buergofol is entitled to any remedy or relief.

BUERGOFOL'S DEMAND FOR JURY TRIAL

59. No response is required to Buergofol's demand for a trial by jury. Omega hereby demands a trial by jury on all issues so triable.

DEFENSES

60. Omega incorporates by reference the foregoing paragraphs in their entirety and asserts the following affirmative and other defenses. By asserting these defenses, Omega does not

admit that it bears the burden of proof on any issue and does not accept any burden it would not otherwise bear. Omega reserves all other defenses pursuant to Rule 8(c) of the Federal Rules of Civil Procedure, the Patent Laws of the United States, and any other defenses, at law or in equity, that now exist or in the future may be available based on discovery and further factual investigation in this case.

First Defense – Failure to State a Claim

61. The First Amended Complaint fails to state a claim on which relief can be granted because Omega has not performed any act or thing and is not proposing to perform any act or thing in violation of any rights validly belonging to Buergofol under the '882 Patent or the '269 Patent (collectively, "Patents-in-Suit").

Second Defense – No Patent Infringement

62. Omega has not infringed any valid, enforceable claim of the Patents-in-Suit either directly or indirectly, literally or under the doctrine of equivalents, at least because the accused instrumentalities do not practice every claimed limitation.

Third Defense – Patent Invalidity

63. The claims of the Patents-in-Suit are invalid and unenforceable under 35 U.S.C. § 102 because the claims lack novelty and are taught and suggested by the prior art.

64. The claims of the Patents-in-Suit are invalid and unenforceable under 35 U.S.C. § 103 because the claims are obvious in view of the prior art.

65. The claims of the Patents-in-Suit are invalid and unenforceable for failure to satisfy the conditions set forth in 35 U.S.C. § 112, including failure of written description, lack of enablement, and claim indefiniteness.

66. The claims of the Patents-in-Suit are invalid and unenforceable for failure to satisfy the conditions set forth in 35 U.S.C. § 116, including the omission of one or more inventors and/or the naming of persons who are not inventors.

Fourth Defense – Prosecution History Estoppel

67. Buergofol is barred, under the doctrine of prosecution history estoppel, from construing the claims of the Patents-in-Suit in such a way as may cover any accused products by reasons of statements made to the United States Patent and Trademark Office during the prosecution of the applications that led to the issuance of the Patents-in-Suit.

Fifth Defense – The '882 Patent – Inequitable Conduct and Fraud on USPTO

68. The USPTO issued a Notice of Allowance to Buergofol on January 25, 2017 with respect to the patent application for the '882 Patent which included a section titled “Reasons for Allowance.”

69. 37 C.F.R. § 1.104(e) provides that the examiner may set forth the “reasons for allowance,” providing the following:

(e) Reasons for allowance. If the examiner believes that the record of the prosecution as a whole does not make clear his or her reasons for allowing a claim or claims, the examiner may set forth such reasoning. The reasons shall be incorporated into an Office action rejecting other claims of the application or patent under reexamination or be the subject of a separate communication to the applicant or patent owner. The applicant or patent owner may file a statement commenting on the reasons for allowance within such time as may be specified by the examiner. Failure by the examiner to respond to any statement commenting on reasons for allowance does not give rise to any implication.

70. In the January 25, 2017 Notice of Allowance, the examiner stated in the Reasons for Allowance section the following reasons for allowing the patent application that resulted in the '882 Patent:

WO 98/12465 is the closest prior art but does not disclose wherein the inner tubular film comprises one or multiple layers an inner facing external side and an outer facing external side facing the carrier material, a coating of at least one of (1)

a coating with a polysiloxane, or (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material.

71. After receiving the Notice of Allowance with the Reasons for Allowance, Buergofol did not file with the USPTO any statements or comments (a) relating to the examiner's Reasons for Allowance in the Notice of Allowance, (b) setting forth any disagreement with the examiner's reasons for allowance, or (c) clarifying or correcting the examiner's reasons for allowance.

72. The inventors, Kurt Stark, Gregor Schleicher, and Abdel-Kader Boutrid, were all substantively involved in the preparation and prosecution of the application for the '882 Patent. Upon information and belief, Dr. Franz Schleicher, who is an owner of Buergofol, was also substantively involved in the preparation and prosecution of the application for the '882 Patent.

73. Independent claim 1 of the '882 Patent has the claim limitation of "a coating of at least ... (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material" ("Missing Claim Limitation"). Claim 10 is dependent from claim 1 and requires "wherein the coating is a coating or covering with at least one migrating compound, and the migrating compound is one of: (1) a lipophilic compound from the group of a wax, paraffin, fatty acid, or a fat."

74. Buergofol construes the Missing Claim Limitation in independent claim 1 to include an outer layer of the inner tubular film that includes a "migrating compound" such as a "wax" (e.g., "EBS wax") that migrates to the exterior surface of the inner tubular film to create a coating on the exterior surface and alleges that Omega infringes the '882 Patent because Omega's outer layer in the inner tubular film allegedly includes a "migrating compound" of "wax" and more specifically "EBS wax."

75. The examiner stated in the Reasons for Allowance of the Notice of Allowance for the '882 Patent that the Missing Claim Limitation was absent from the information of record and specifically stated that “WO 98/12465 is the closest prior art but does not disclose ... a coating of at least ... (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material.”

76. In 2008, Buergofol sold and shipped multilayer inner tubular film having multiple layers to International Pipelining located in the United States pursuant to Order No. 10802804 (“2008 Prior Art Film”). In 2011, Buergofol sold and shipped multilayer inner tubular film having multiple layers to Light Stream Inc. located in the United States pursuant to Order No. 11104751 (“2011 Prior Art Film”).

77. The 2008 Prior Art Film and the 2011 Prior Art Film sold and shipped to International Pipelining and Light Stream respectively all included a “migrating compound” within the outer layer (a polyamide layer) of the inner tubular film that faces the carrier material of the UV CIPP liner. The “migrating compound” within the outer layer of the 2008 Prior Art Film was a wax. The “migrating compound” of wax migrated to the external side of the inner tubular film facing the carrier material thereby creating a “coating” that covered the entire circumferential area of the external side of the 2008 Prior Art Film facing the carrier material of the UV CIPP liner.

78. Upon information and belief, at all times from the filing date to the issue date of the '882 Patent, despite knowing about the materiality of the 2008 Prior Art Film and the 2011 Prior Art Film sales and shipments into the United States prior to the March 11, 2012 critical date of the '882 Patent, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher intentionally deceived the USPTO by not disclosing to the USPTO these sales and

shipments into the United States which they knew were material to the patentability of the '882 Patent and would have prevented issuance of the '882 Patent.

79. Upon information and belief, Dr. Kurt Stark was the Director of Business Development at Buergofol from October 2011 until at least the May 23, 2017 issue date of the '882 Patent and has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

80. Upon information and belief, Abdel-Kader Boutrid has been employed by Buergofol since 1998 to present as the Head of Research and Development where he has been responsible for product development and quality control including overseeing how films are manufactured by Buergofol including inner tubular film used for making UV CIPP pipe liners. Upon information and belief, Abdel-Kader Boutrid has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

81. Upon information and belief, Gregor Schleicher has been the Technical Manager of Buergofol since March 2004 to present, and has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

82. Upon information and belief, Dr. Franz Schleicher has been an owner and CEO of Buergofol since at least 1998 to present, and has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the

March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

83. Therefore, upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher all knew about the 2008 Prior Art Film and 2011 Prior Art Film sales and shipments to International Pipelining and Light Stream in the United States. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew the 2008 Prior Art Film and the 2011 Prior Art Film included a “migrating compound” within the outer layer of the film. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew that the “migrating compound” within the outer layer of the film was wax.

84. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew the 2008 Prior Art Film and the 2011 Prior Art Film sales and shipments were material to the patentability of claim 1 of the '882 Patent and made a deliberate decision to withhold the 2008 Prior Art Film and the 2011 Prior Art Film sales and shipments into the United States.

85. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew that if the 2008 Prior Art Film and the 2011 Prior Art Film were disclosed to the USPTO during prosecution of the application for the '882 Patent, the USPTO examiner would have used the 2008 Prior Art Film and the 2011 Prior Art Film with the “migrating compound” of wax within the outer layer to find at least independent claim 1 unpatentable in view of the cited prior art references disclosing CIPP liners including International Publication No. WO 98/12465. A USPTO examiner would have found it obvious for a person of ordinary skill in the art (“POSITA”) to combine the inner tubular film of the 2008 Prior Art Film and the 2011 Prior

Art Film to replace the inner tubular film of International Publication No. WO 98/12465. The USPTO examiner would have found that a POSITA would be motivated to use the 2008 Prior Art Film and 2011 Prior Art Film with predictable results as the inner tubular film of the CIPP liner disclosed in International Publication No. WO 98/12465 to have a removable inner tubular film that does not stick to the cured resin thereby allowing for removal of the inner tubular film from the cured resin. The 2008 Prior Art Film and the 2011 Prior Art Film are material prior art to the '882 Patent and the USPTO would not have allowed at least independent claim 1 of the '882 Patent but for the intentional withholding prior art sales and shipments of the 2008 Prior Art Film and the 2011 Prior Art Film by Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher.

86. The 2008 Prior Art Film and the 2011 Prior Art Film are not cumulative of other information considered by the USPTO examiner. The USPTO examiner specifically found and stated in the Reasons for Allowance in the Notice of Allowance that the following limitation in independent claim 1 was missing from the prior art references:

wherein the inner tubular film comprises one or multiple layers an inner facing external side and an outer facing external side facing the carrier material, a coating of at least one of (1) a coating with a polysiloxane, or (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material.

87. The 2008 Prior Art Film and the 2011 Prior Art Film sold and shipped into the United States prior to the March 11, 2012 critical date of the '882 Patent both include this missing limitation because of the "migrating compound" (i.e., wax) within the outer polyamide layer that faces the resin and carrier material. The 2008 Prior Art Film and the 2011 Prior Art Film are not cumulative of any of the prior art references disclosed to the USPTO during prosecution of the '882 Patent and therefore are material to the patentability of at least independent claim 1.

88. The '882 Patent is invalid, void, or unenforceable for the above-said inequitable conduct during the prosecution of the '882 Patent by Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher.

Sixth Defense – The '269 Patent – Inequitable Conduct and Fraud on USPTO

89. USPTO issued a Notice of Allowance to Loparex on January 30, 2014 with respect to the patent application for the '269 Patent which included a section titled “Reasons for Allowance.”

90. In the January 30, 2014 Notice of Allowance, the examiner stated in the Reasons for Allowance section the following reasons for allowing the patent application that resulted in the '269 Patent:

1. The following is an examiner's statement of reasons for allowance: After a review of the prior art of record, it is believed that the present invention is novel and non-obvious wherein no reference discloses a tube comprising a layer sequence including at least one thermoplastic olefin homo-or copolymer, an adhesion promoter layer, an internally situated layer comprised of at least one homo and/ or copolyamide, a second adhesive-promoter layer and a layer of at least one homo and/ or copolyamide, as an external layer all in the form of a tubular film, with the VICAT softening point of the thermoplastic olefin homo or copolymer of the first layer is at least 100°C, and an externally situated single or multilayer tubular film which is impermeable to liquids and reflects and/ or absorbs UV radiation and/ or short-wave, visible light and a support material situated therebetween and saturated with a reactive synthetic resin, as recited by claim 1.

91. On April 11, 2014, the Chinese Patent Office issued an Office Action rejecting Loparex's Chinese Application No. CN201180029444, the Chinese counterpart to the '269 Patent. The April 11, 2014 Chinese Office Action cited Russian Patent No. RU2182999C1 (“Khramenkov”) as the main prior art reference, along with European Application No. EP0342897A2 (“Jones”), as prior art in rejecting the claims of Chinese Application No. CN201180029444. The claims of Chinese Application No. CN201180029444 have substantially

the same scope as the allowed claims in the '269 Patent. A certified translation of Russian Patent No. RU2182999C1 is attached hereto as Exhibit H.

92. After receiving the Notice of Allowance with the Reasons for Allowance, Loparex did not file with the USPTO any statements or comments (a) relating to the examiner's Reasons for Allowance in the Notice of Allowance, (b) setting forth any disagreement with the examiner's reasons for allowance, or (c) clarifying or correcting the examiner's reasons for allowance.

93. On April 23, 2014, patent prosecution counsel for Loparex, William C. Gerstenzang, paid the Issue Fee for the application for the '269 Patent.

94. Prior to paying the Issue Fee for the '269 Patent, Mr. Gerstenzang did not file an Information Disclosure Statement pursuant to 37 CFR § 1.97(d).

95. After paying the Issue Fee for the '269 Patent, Mr. Gerstenzang did not file an Information Disclosure Statement under the USPTO's pilot program called Quick Path Information Disclosure Statement (QPIDS).

96. After paying the Issue Fee for the '269 Patent, Mr. Gerstenzang did not file a petition under 37 CFR § 1.313(c)(2) to withdraw the application from issue in order to permit entry of an RCE and a proper Information Disclosure Statement.

97. After paying the Issue Fee, Mr. Gerstenzang did not file a petition under 37 CFR § 1.313(c)(3) to withdraw the application from issue for express abandonment in favor of a continuation application with a proper Information Disclosure Statement.

98. Upon information and belief, Mr. Gerstenzang received a copy of the April 11, 2014 Office Action from the Chinese Patent Office for Loparex's Chinese Application No. CN201180029444 citing Russian Patent No. RU2182999C1 by at least July 14, 2014.

99. Mr. Gerstenzang knew that Russian Patent No. RU2182999C1 was material to the patentability of at least claim 1 of the '269 Patent because Russian Patent No. RU2182999C1 disclosed the three major layers that were missing in the prior art references as stated by the USPTO examiner in the Reasons for Allowance of the Notice of Allowance. Upon information and belief, on July 14, 2014, Mr. Gerstenzang filed with the USPTO an improper Information Disclosure Statement that identified Russian Patent No. RU2182999C1 in a manner that he reasonably expected would not be considered by the USPTO.

100. The Information Disclosure Statement filed on July 14, 2014 included a copy of Russian Patent No. RU2182999C1 in Russian language and only a translation of the Abstract of Russian Patent No. RU2182999C1. Mr. Gerstenzang did not provide to the USPTO (a) a concise explanation of the relevance of Russian Patent No. RU2182999C1, (b) a complete translation of Russian Patent No. RU2182999C1, or (3) the April 11, 2014 Office Action issued by the Chinese Patent Office in Chinese Application No. CN201180029444.

101. Mr. Gerstenzang reasonably expected that the examiner would not consider either the Information Disclosure Statement nor the Russian Patent No. RU2182999C1 submitted on July 14, 2014 because 37 CFR § 1.97 does not allow for filing of an Information Disclosure Statement after payment of the Issue Fee unless an applicant files the Information Disclosure Statement pursuant to 37 CFR § 1.97(d) which Mr. Gerstenzang did not do. 37 CFR § 1.97(i) states that "If an information disclosure statement does not comply with either this section or § 1.98, it will be placed in the file but will not be considered by the Office." Therefore, Russian Patent No. RU2182999C1 was never considered by the USPTO which is what Mr. Gerstenzang reasonably expected would occur because of his filing of the Information Disclosure Statement and Russian Patent No. RU2182999C1 in a manner that did not comply with 37 CFR § 1.97.

102. On August 5, 2014, the '269 Patent was issued without the USPTO considering Russian Patent No. RU2182999C1.

103. The References Cited section of the '269 Patent does not cite Russian Patent No. RU2182999C1 or the April 11, 2014 Office Action.

104. The examiner did not consider Russian Patent No. RU2182999C1 when determining the patentability of any of the claims of the '269 Patent.

105. The examiner did not consider the April 11, 2014 Office Action issued by the Chinese Patent Office in Chinese Application No. CN201180029444 when determining the patentability of any of the claims of the '269 Patent.

106. The examiner reviewing the '269 Patent for patentability did not consider Russian Patent No. RU2182999C1 in any manner.

107. On April 10, 2023, Omega sent a letter to Buergofol regarding the inequitable conduct by Mr. Gerstenzang relating to Russian Patent No. RU2182999C1 and his intentional withholding from the USPTO Russian Patent No. RU2182999C1 and the Office Action citing Russian Patent No. RU2182999C1 in Loparex's Chinese Application No. CN201180029444, which is the Chinese counterpart application to the '269 Patent. A true and correct copy of the April 10, 2023 letter is attached as Exhibit C.

108. Claim 1 of the '269 Patent claims a five-layer sequence inner tubular film having the following specific five-layer sequence not shown in the information of record at the USPTO:

- (a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, *as one of the external layers*,
- (b) an adhesive-promoter layer (b),
- (c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide,

(d) an adhesive-promoter layer (d), and

(e) a layer (e) comprised of at least one homo- and/or copolyamide, *as one of the external layers.*

109. Russian Patent No. RU2182999C1 is material to the patentability of claim 1 of the '269 Patent because it discloses the layer sequence claimed in independent claim 1 of the '269 Patent and that identified by the USPTO examiner in the Reasons for Allowance section of the Notice of Allowance.

110. Russian Patent No. RU2182999C1 (Khramenkov), entitled "Method for Applying Hose Lining Onto Inner Surface of Pipeline and Applied Coating," is for "applying of hose lining onto inner surface of pipelines" – i.e., a CIPP liner. (Exhibit H, Cover Page.) Russian Patent No. RU2182999C1 was filed on July 3, 2001, and was published on May 27, 2002. (*Id.*) Russian Patent No. RU2182999C1 therefore qualifies as pre-AIA prior art under 35 U.S.C. § 102(b).

111. Russian Patent No. RU2182999C1 discloses "applying tubular lining onto the inner surface of a pipeline and a lining of the inner surface of a pipeline" – i.e., a CIPP liner for pipes including subterranean sewer pipes. (Exhibit H, p. 3.)

112. Russian Patent No. RU2182999C1 further discloses an inner tubular film that has multiple layers with three main layers of a first external layer of polyamide 6, an intermediate layer of polyamide 12 and a second external layer of a thermoplastic polymeric material (polyethylene and polypropylene). (Exhibit H, Abstract, Figure 1.) There is no required conditioning step in Russian Patent No. RU2182999C1 so it also discloses "an optionally nonconditioned multilayer film." (Exhibit H.)

113. Russian Patent No. RU2182999C1 also discloses material for layer (a) that has a VICAT softening point of at least 100 degrees Celsius as recited in independent claim 1.

114. Russian Patent No. RU2182999C1 discloses a three-layer inner tubular film for a CIPP liner with a major layer sequence that is the same five-layer sequence claimed in independent claim 1 of the '269 Patent that the examiner found to be missing in the prior art references considered by the examiner. Russian Patent No. RU2182999C1 further discloses an outer tubular film and a curable resin between the inner tubular film and the outer tubular film.

115. Russian Patent No. RU2182999C1 also discloses the resin impregnated support material between an inner tubular film (4) and an outer tubular film (5). Khramenkov discloses an external “layer [8] containing as thermoplastic polymeric material mixture of polyethylene with polypropylene.” (Exhibit H, Abstract). Khramenkov further discloses that “Inner layer 8 of inner tubular film 4 comprises a mixture of polyethylene in the amount of 20-40 wt.% with polypropylene in the amount of 80-60 wt.%.” (Exhibit H, p. 6 at col. 1, ll. 20-29, p. 4 at col. 2, ll. 52-60). It is well-known that polypropylene has a higher VICAT than polyethylene. A person of ordinary skill in the art would understand that a mixture of 60% by weight of polypropylene (the lowest amount) and 40% by weight of polyethylene would have a VICAT of approximately 120° C which is greater than 100° C. If a higher portion of the mixture was polypropylene, the VICAT temperature would be higher than 120° C. Khramenkov therefore discloses “wherein the VICAT softening point of the thermoplastic olefin homo- or copolymer of the layer (a) is at least 100° C.” as recited by independent claim 1.

116. Khramenkov discloses an external “layer [8] containing as thermoplastic polymeric material mixture of polyethylene with polypropylene.” (Exhibit H, Abstract and Figure 1.) Khramenkov further discloses that “Inner layer 8 of inner tubular film 4 comprises a mixture of polyethylene in the amount of 20-40 wt.% with polypropylene in the amount of 80-60 wt.%.” (Exhibit H, p. 6 at col. 1, ll. 20-29.) Khramenkov expressly recognizes the “mixture of

polyethylene with polypropylene as a thermoplastic polymer material.” (Exhibit H, p. 5 at col. 2, ll. 19-20.) A person of ordinary skill in the art would understand that polyethylene and polypropylene are thermoplastic polyolefins as recited in layer (a) of claim 1. Khramenkov therefore discloses “(a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, as one of the external layers” as recited by independent claim 1.

117. Khramenkov further discloses an “intermediate layer [7] containing polyamide 12.” (Exhibit H, Abstract, Figure 1, p. 4 at col. 1, ll. 35-40, p. 5 at col. 2, ll. 4-20, p. 7 at col. 1, ll. 25-30.) Khramenkov discloses that the intermediate layer 7 is between the opposing external layers 6 and 8. (*Id.*) Khramenkov therefore discloses “(c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide” as recited by independent claim 1.

118. Khramenkov further discloses a “first outer layer [6] containing polyamide 6.” (Exhibit H, Abstract, Figure 1, p. 4 at col. 1, ll. 31-35, p. 5 at col. 2, ll. 8-11, p. 7 at col. 1, ll. 22-26.) Khramenkov therefore discloses “(e) a layer (e) comprised of at least one homo- and/or copolyamide, as one of the external layers” as recited by independent claim 1.

119. Khramenkov further discloses an internally situated multilayer film that is an “inner tubular film 4.” (Exhibit H, Figure 1, p. 4 at col. 1, ll. 9-30, 50-57, p. 4 at col. 2, ll. 9-17, 53-63, p. 5 at col. 1, ll. 58-63). Khramenkov discloses an outer tubular film 5 surrounding the resin impregnated material and that is in contact with the pipe which “prevents external intrusion of groundwater into uncured tubular lining” to protect the uncured bonding agent (i.e., resin) from absorbing water which “prevents bonding agent from curing.” (Exhibit H, Figure 1, p. 5 at col. 1, ll. 32-42.) The outer tubular film 5 of Khramenkov is therefore impermeable to liquids. Khramenkov does not expressly disclose that the outer tubular film 5 “reflects and/or absorbs UV radiation and/or short-wave, visible light.” However, a person of ordinary skill in the art would

know that all plastic film to some extent reflects and/or absorbs a portion of UV radiation and/or short-wave, visible light. Khramenkov therefore discloses “an externally situated single- or multilayer tubular film which is impermeable to liquids, and which reflects and/or absorbs UV radiation and/or short-wave, visible light, as externally situated tube” as recited in independent claim 1. To the extent that Khramenkov does not disclose this limitation, a person of ordinary skill in the art would have been motivated to use an outer tubular film that reflects and/or absorbs UV radiation and/or short-wave, visible light to prevent premature curing of a UV curable resin – such as the UV curable resin in Jones. A person of ordinary skill in the art would have known that using UV curable resins are desirable because of their increased strength compared to heat curable resins. A person of ordinary skill in the art would have known to use an outer tubular film that reflects and/or absorbs UV radiation and/or short-wave, visible light when using a UV curable resin which would have used known outer film technology in a manner that would be predictable to a person of ordinary skill in the art and yield predictable results – i.e., reflect and/or absorb UV radiation and/or short-wave, visible light thereby preventing the premature hardening of the UV curable resin and allow for extended periods of time of storage. Khramenkov in view of Jones therefore discloses “an externally situated single- or multilayer tubular film which is impermeable to liquids, and which reflects and/or absorbs UV radiation and/or short-wave, visible light, as externally situated tube” as recited by independent claim 1.

120. Khramenkov discloses a “reinforcing tubular lining 2 impregnated with a curing bonding agent is placed between outer 5 and inner 4 three-layer tubular films.” (Exhibit H, Figure 1, p. 5 at col. 1, ll. 64 - col. 2, l. 1, *see also* Abstract, claims 1 and 9, p. 6 at col. 1, ll. 49-51, col. 2, ll. 14-17). Khramenkov in view of Jones therefore discloses “a support material situated therebetween and saturated with a reactive synthetic resin” as recited by independent claim 1.

121. Russian Patent No. RU2182999C1 (Khramenkov) discloses all of the elements missing in the information of record at the USPTO with respect to independent claim 1 of the '269 Patent as discussed above with the exception that it does not expressly disclose the adhesion promoter layers between the three major layers as claimed in independent claim 1 of the '269 Patent. However, adhesion promoter layers between major layers was well known prior to the '269 Patent and are disclosed in European Application No. EP0342897A2 ("Jones") as cited in the Chinese Office Action. Russian Patent No. RU2182999C1 discloses melting the layers together to bond together but a person of ordinary skill in the art would easily understand that the adhesion promoter layers from European Application No. EP0342897A2 (Jones) may be used between the major three layers to adhere together instead of melting and would be motivated to do so because it would be less expensive to manufacture with a one-step manufacturing process, among other benefits.

122. A person of ordinary skill in the art would have found it routine and obvious to use an adhesion-promoter layer between layers 7 and 8 of Khramenkov and layers 6 and 7 of Khramenkov. Page 2 at lines 42-49 of Jones discloses a "bonding layer can be provided between the nylon polymer layer and the weldable synthetic plastics composition." Page 3 at lines 15-20 of Jones further discloses an example embodiment where a "tie layer" is used between the nylon and ionomer layers. A person of ordinary skill in the art would have found it obvious and would have been motivated to use an adhesion-promoter layer, such as the bonding/tie layer of Jones, between layers 7 and 8 of Khramenkov and layers 6 and 7 of Khramenkov instead of melting the layers together to (1) ensure that the layers are fully bonded together, (2) avoid damaging the mechanical properties of the layers by using heat to melt the layers together, (3) avoid the extra unnecessary and costly manufacturing step of heating the layers to melt to together because the

adhesion-promoter layer can be co-extruded together, and (4) efficiently co-extrude all five layers (a)-(e) together in an efficient single process. Using an adhesion promoter layer to bond the layers 7 and 8 of Khramenkov and layers 6 and 7 of Khramenkov together instead of melting the layers together would have been simply combining known prior art elements according to known methods of film manufacture to yield predictable results for a person of ordinary skill in the art. A person of ordinary skill in the art would also know that the simple substitution of an adhesion promoter layer instead of melting the layers together would obtain predictable results with a reasonable expectation of success. Khramenkov in view of Jones therefore discloses “(b) an adhesive-promoter layer (b)” and “(d) an adhesive-promoter layer (d)” as recited by independent claim 1.

123. The April 11, 2014 Office Action issued by the Chinese Patent Office in Chinese Application No. CN201180029444 is material to the patentability of the '269 Patent because it explains in detail how the claims of the Chinese counterpart to the '269 Patent are not patentable in view of Russian Patent No. RU2182999C1 in combination with European Application No. EP0342897A2.

124. For example, the April 11, 2014 Office Action for Chinese Application No. CN201180029444 states (machine translated version downloaded from European Patent Office website at <https://register.epo.org/ipfwretrieve?apn=CN.201180029444.A&lng=en>):

Claims 1-3,6, 10-14, 19-23 is not conform to the regulation of the relevant inventiveness of the Article 22, para. 3 of the Patent Law. Independent claims 1 are not conform to the regulation of the relevant inventiveness of the Article 22, para. 3 of the Patent Law. The said claim is asked for protection one kind and is applicable to the hose that inserts that renovates the underground piping.

D1 (RU2182999C1) discloses a pipeline rehabilitating technique lining (it is applicable to the hose that inserts that renovates the underground piping to correspond the present application). Said lining has outside tubular membrane 5 (it is located outside hose to correspond the present application), solidifiable binder

flooding enhancement layer 2, with the thermoplastic resin layer 3 of 2 rigid connections of solidifiable binder flooding enhancement layer, and the tubular membrane of inside three-layer 4 (said inside three-layer tubular membrane 4 must be that liquid is close, correspond inside hose), said inside three-layer tubular membrane 4 is 6 (the corresponding of comprising polyamide 12 layer (e) of layer in the extroversion in proper order, 7 (corresponds layer (c) of layer constituted by polyamide 12 and 8 (the corresponding layer (a) of layer that form by the mixture of polyethylene and polypropylene. Said inside three-layer tubular membrane 4 can take out after the pipeline rehabilitating technique is accomplished. ...

The technical solution that the said claim was asked for protection is compared with the disclosed technological content of D1, distinguishing feature (1) lies in in the present application respectively being provided with between layer (a) and the layer (c) and layer (c) and layer (e) increasing attaches agent layer, the part is penetrable at least and the multilayer film is to the ultraviolet radiation; Distinguishing feature (2) lie in the thermoplasticity alkene homopolymer or the copolymer on the present application layer (a), have VICAT temperature 100 DEG Cs at least. On the basis of said distinguishing feature, how the technical problem that the present application was actually solved obtains to glue well between each layer, and the hose that inserts of ultraviolet solidification can be realized smoothly in the carrier material layer.

To distinguishing feature (1): D2 (EP0342897A2) discloses a multiply polymer film. Said multiply polymer film contains the nylon layer that has the VICAT temperature that is less than 170 DEG Cs But it becomes the plastic layer with the welded connection and is connected But said welded connection becomes the preferred polyethylene ionic compound of plastic layer But, become to set up the binder layer between the plastic layer on nylon layer and welded connection, modified polyolefin can be adopted in said binder layer, by way of example Modified PE or mechanical properties, modified material is like the maleic anhydride, can contain other layer, like the polyethylene layer But said polyethylene layer can be provided binder layer and welded connection and be become between the plastic layer (but form nylon layer / binder layer / polyethylene layer / welded connection promptly and become to mould, the structure of the bed of material). ... Thus it can be seen that, set up modified polyolefin binder layer between nylon layer and polyolefin layer, the transparent technical feature of part is open by the D2 at least to the ultraviolet radiation for the multilayer film, and the reacting phase is together, all anchoring strength and the smooth solidification of realization response nature resin that improves between each layer of multilayer film, thereby, combine well between each layer of the said inside three-layer tubular membrane 4 of D1 in order to make, the those skilled in the art expect easily D1 said layer 6 and layer and layer between 77 with layer respectively set up the modify binder layer of polyolefin of one deck between 8, and make the tubular membrane of said inside three-layer to be that the part is penetrable at least to the ultraviolet radiation, make the unsaturated polyester resin of solidifiable binder flooding enhancement layer 2 realize ultraviolet solidification smoothly thereby.

To distinguishing feature (2), the those skilled in the art is according to the actual need of the heat resistance of the thermoplasticity alkene homopolymer that improves said layer (a) or copolymer, can determine the thermoplasticity alkene homopolymer on said layer (a) or the suitable dimension card softening point of copolymer through limited experiment, and its technical effect can be expected.

Consequently, technical solution that claim 1 was asked for protection, conspicuous to the those skilled in the art, therefore the technical solution that the said claim was asked for protection does not have prominent substantive features and a notable progress, therefore do not possess the inventiveness.

125. Mr. Gerstenzang's filing of the Information Disclosure Statement confirms that he knew that RU2182999C1 was material to the patentability of at least claim 1 of the '269 Patent. Upon information and belief, Mr. Gerstenzang, however, intentionally chose to improperly disclose RU2182999C1 in a manner that he reasonably expected would result in the USPTO not considering the reference. The manner in which Mr. Gerstenzang submitted the Information Disclosure Statement demonstrates that Mr. Gerstenzang attempted to avoid the reopening of prosecution of the '269 Patent while appearing to submit the prior art reference for consideration.

126. Russian Patent No. RU2182999C1 is not cumulative of any of the information of record considered by the examiner. None of the information considered by the examiner in the information of record within the '269 Patent discloses the inner tubular film having a five-layer sequence as claimed in independent claim 1. The examiner stated in the Reasons for Allowance that the specific five-layer sequence was "novel and nonobvious":

After a review of the prior art of record, it is believed that the present invention is novel and non-obvious wherein no reference discloses a tube comprising a layer sequence including at least one thermoplastic olefin homo- or copolymer, an adhesion promoter layer, an internally situated layer comprised of at least one homo and/ or copolyamide, a second adhesive-promoter layer and a layer of at least one homo and/ or copolyamide, as an external layer all in the form of a tubular film.

127. Russian Patent No. RU2182999C1 is material to the patentability of independent claim 1 because when combined with Jones the combination discloses and makes obvious at least claim 1 of the '269 Patent.

128. Upon information and belief, Mr. Gerstenzang intentionally chose to file the Information Disclosure Statement and Russian Patent No. RU2182999C1 in a manner that was not in compliance with 37 CFR § 1.97 and therefore would not be considered by the USPTO pursuant to 37 CFR § 1.97(i). Mr. Gerstenzang was able to avoid having Russian Patent No. RU2182999C1 considered by the USPTO examiner to determine the patentability of at least claim 1 of the '269 Patent while attempting to give the impression of not intentionally withholding Russian Patent No. RU2182999C1 from the USPTO.

129. But for Mr. Gerstenzang's deliberate choice of filing of the Information Disclosure Statement and Russian Patent No. RU2182999C1 in a manner that would not be considered by the USPTO, at least claim 1 of the '269 patent would not have been allowed by the USPTO.

130. The '269 Patent is invalid, void, or unenforceable for the above-said inequitable conduct during the prosecution of the '269 Patent by William C. Gerstenzang.

Seventh Defense – Ensnarement

131. All or some of Buergofol's claims for infringement are barred by the doctrine of ensnarement.

Eighth Defense – License

132. Buergofol's claims for relief are barred to the extent Omega has an express or implied license to the Patents-in-Suit.

Ninth Defense – Patent Exhaustion, First Sale and Full Compensation

133. Buergofol's claims for relief are barred, in whole or in part, under the doctrines of patent exhaustion, first sale, or full compensation.

Tenth Defense – Laches

134. Buergofol's claims are barred, in whole or in part, by the doctrine of laches.

Eleventh Defense – Lack of Standing

135. To the extent that Plaintiff lacks all substantive rights to bring suit and to exclude others from practicing the claims of the Patents-in-Suit, Plaintiff's claims are barred by a lack of standing.

Twelfth Defense – Failure to Join

136. Upon information and belief, Buergofol has failed to join an indispensable party and/or has failed to join the real party in interest.

137. By way of non-limiting example and upon information and belief, Buergofol has failed to join Loparex Germany GmbH & Co. KG, which is an indispensable party and/or the real party in interest with respect to the '269 Patent.

138. By way of another non-limiting example and upon information and belief, Buergofol has failed to join Dr. Kurt Stark, which is an indispensable party and/or the real party in interest with respect to the '269 Patent and/or the '882 Patent.

139. Buergofol's claims are barred to the extent Buergofol lacks standing.

Thirteenth Defense – Limitations on Damages (35 U.S.C. § 286)

140. Buergofol's claim for damages is barred, in whole or in part, by the statutory limitations of 35 U.S.C. § 286.

Fourteenth Defense – Limitations on Damages (35 U.S.C. § 287)

141. Buergofol's claim for damages is barred, in whole or in part, for failure to comply with 35 U.S.C. § 287 by Buergofol, Buergofol's licensees and customers, Buergofol's predecessor(s)-in-interest, and/or the licensees and customers of Buergofol's predecessor(s)-in-interest.

Fifteenth Defense – Limitations on Damages (35 U.S.C. § 288)

142. Buergofol's claim for damages is barred, in whole or in part, by 35 U.S.C. § 288.

Sixteenth Defense – Failure to Mitigate Damages

143. Buergofol has failed to take reasonable steps to mitigate, alter, reduce, or otherwise diminish its alleged damages, in whole or in part, and, as a result of such failure and refusal to undertake reasonable mitigation efforts, Buergofol's purported claims for damages are barred in their entirety.

144. By way of non-limiting example, Buergofol sold and continued to sell inner tubular film to Omega knowing that Omega was using the inner tubular film for UV cured-in-place-pipe (CIPP) liners.

Seventeenth Defense – Unjust Enrichment

145. Buergofol is barred from recovering all or part of its requested relief to the extent it would be unjustly enriched by any recovery.

146. Buergofol's claims for damages or other monetary relief must be offset and reduced by the value received.

Eighteenth Defense – Acquiescence, Waiver and Equitable Estoppel

147. Buergofol's claims are barred, in whole or in part, by equitable doctrines, including the doctrines of acquiescence, waiver and/or equitable estoppel.

Nineteenth Defense – Unclean Hands

148. Buergofol's claims are barred, in whole or in part, by the doctrine of unclean hands, at least because (i) Buergofol had full knowledge of the '269 Patent and the '882 Patent when it sold its film to Omega; (ii) Buergofol knew the structure and composition of its film sold to Omega at the time of the sales; and (iii) Buergofol knew or should have known that, when Omega used

Buergofol's film in UV CIPP liners, Omega's use would, according to Buergofol, infringe one or both of the '269 Patent and the '882 Patent.

149. Despite the information known to it, Buergofol authorized and encouraged Omega's use of Buergofol's film in Omega UV CIPP pipe liners.

150. Buergofol purchased the '269 Patent just before filing the Complaint, apparently to snare Omega with allegations of infringement for actions that Buergofol itself induced or authorized.

151. Buergofol's acts of inducing and profiting from the alleged infringement, and then engineering a way to snare Omega in claims of infringement, are unconscionable and constitute unclean hands.

Twentieth Defense – Patent Misuse

152. Buergofol's claims against Omega for alleged infringement of the Patents-in-Suit are barred by the doctrine of misuse.

153. By way of non-limiting example, Buergofol requires licensees to purchase other specific products as a condition of the license agreement (patent tying).

154. By way of another non-limiting example, Buergofol is attempting to enforce patents that it knows to be invalid and/or not infringed.

155. By way of another non-limiting example, Buergofol is alleging patent infringement with respect to products made from film supplied by Buergofol and used as intended.

Twenty-First Defense – Fraud

156. Buergofol fraudulently represented to Omega that ERGO.VAC-34A0004 three-layer inner tubular film was being sold and shipped to Omega, which Omega relied upon.

157. Upon information and belief, Buergofol knowingly shipped ERGO.VAC-34C0004 seven-layer inner tubular film instead of ERGO.VAC-34A0004 three-layer inner tubular film.

158. Buergofol never informed Omega that it was substituting or using a different film other than ERGO.VAC-34A0004.

159. Upon information and belief, all shipments of inner tubular film from Buergofol were identified in writing and on packing labels as ERGO.VAC-34A0004.

160. Buergofol never informed Omega that Buergofol believed that, when Omega used the ERGO.VAC-34C0004 seven-layer inner tubular film in its UV CIPP liners, Omega would infringe the '269 Patent.

161. Had Omega known the truth about the type of film Buergofol was shipping to Omega and Buergofol's belief that use of the film in UV CIPP liners infringed the '269 Patent, Omega would not have purchased the film from Buergofol.

Twenty-Second Defense – Buergofol Not Entitled to Attorneys' Fees

162. If Buergofol is entitled to any remedy, Buergofol is not entitled to a finding that this case is exceptional warranting attorneys' fees under 35 U.S.C. § 285, or pursuant to the Court's inherent power.

Twenty-Third Defense – No Injunctive Relief

163. Buergofol is not entitled to injunctive relief because (1) Buergofol has not suffered nor will it suffer irreparable harm because of Omega's conduct; (2) any harm to Buergofol would be outweighed by the harm to Omega if any injunction were entered; (3) Buergofol has an adequate remedy at law if it were to prevail in this action; and (4) the public interest would not be served by an injunction.

RESERVATION OF RIGHTS

164. Omega has not knowingly or intentionally waived any applicable defenses, and it reserves the right to assert and rely upon other applicable defenses that may become available or

apparent through the course of this action. Omega reserves the right to amend, or seek to amend, its answer, including its affirmative and other defenses.

OMEGA'S COUNTERCLAIMS

1. Without admitting any of the allegations of the First Amended Complaint other than those expressly admitted herein, and without prejudice to any of Omega's right to plead additional counterclaims as additional information becomes available, Counterclaim-Plaintiff Omega alleges as follows against Counterclaim-Defendant Buergofol:

THE PARTIES

2. Counterclaim-Plaintiff Omega is a South Dakota corporation with its principal place of business located in Lincoln County at 515 Noid Road, Canton, South Dakota 57013.

3. On information and belief, Counterclaim-Defendant Buergofol alleges it is a limited liability company organized under the laws of Germany, with its principal place of business at Jahnstrasse 10, 93354 Siegenburg, Germany. *See* Dkt. 163, ¶ 1.

JURISDICTION AND VENUE

4. This Court has subject matter jurisdiction of Omega's Counterclaims for declaratory judgment brought under 28 U.S.C. §§ 2201 and 2202 pursuant 28 U.S.C. §§ 1331 and 1338(a). Omega's Counterclaims for declaratory judgment arise under the patent laws of the United States.

5. This Court has subject matter jurisdiction of Omega's remaining Counterclaims pursuant to 28 U.S.C. §§ 1331, 1332, and 1367.

6. This Court has personal jurisdiction over Buergofol because, by initiating this lawsuit, Buergofol has submitted to the jurisdiction of this District. This Court also has personal jurisdiction over Buergofol because it regularly does business within this jurisdiction and/or has introduced its products into the stream of commerce knowing that its products would be sold and

used within this jurisdiction, and has committed acts which give rise to Omega's counterclaims in this jurisdiction.

7. Venue for these Counterclaims is proper in this District under 28 U.S.C. §§ 1391 and 1400.

FACTUAL BACKGROUND

A. The '269 Patent.

8. On June 15, 2010, Buergofol's predecessor-in-interest, Huhtamaki Films Germany GmbH & Co. KG, filed German Application No. DE 102010023764 to which the '269 Patent claims priority.

9. Through several name changes, Huhtamaki Films Germany GmbH & Co. KG was eventually renamed Loparex Germany GmbH & Co. KG. Huhtamaki Films and Loparex are both referred to herein as "Loparex."

10. On November 30, 2012, Loparex filed U.S. Application No. 13/690,076, which claimed priority to German Application No. DE 102010023764 and eventually issued as U.S. Patent No. 8,794,269.

11. On August 10, 2022, five-days prior to filing this lawsuit, Buergofol allegedly acquired ownership rights in the '269 Patent from Loparex.

12. The only document evidencing Buergofol's acquisition of rights in the '269 Patent is a one-page patent assignment agreement purportedly executed on August 10, 2022.

13. Upon information and belief, the one-page assignment agreement of the '269 Patent is not the only agreement between Loparex and Buergofol relating to the '269 Patent.

14. Upon information and belief, Buergofol and Loparex communicated with each other regarding the possibility of Buergofol granting to Loparex a license to the '269 Patent.

15. Upon information and belief, Buergofol and Loparex discussed a royalty rate for a possible license.

16. Upon information and belief, Buergofol and Loparex entered into no license agreement regarding the '269 Patent.

17. Upon information and belief, Buergofol did not pay any financial compensation for the '269 Patent.

18. Upon information and belief, Loparex has the right to reacquire ownership of the '269 Patent.

19. Upon information and belief, Dr. Kurt Stark is at least a co-inventor of the '269 Patent.

20. Upon information and belief, Dr. Kurt Stark is at least a co-owner of the '269 Patent.

21. By at least September 29, 2014, Buergofol knew of the '269 Patent.

22. On September 29, 2014, Buergofol disclosed the '269 Patent to the USPTO in an Information Disclosure Statement (IDS) filed during the prosecution of U.S. Application No. 14/246,464.

23. On February 20, 2017, Buergofol disclosed the '269 Patent to the USPTO in an Information Disclosure Statement (IDS) filed during the prosecution of U.S. Application No. 15/302,881.

24. The layer (a) of independent claim 1 of the '269 Patent is directly adjacent to the support material.

25. Upon information and belief, prior to purchasing the '269 Patent five-days before filing this lawsuit, Buergofol believed at least independent claim 1 of the '269 Patent was invalid.

B. Buergofol's 2012 Cancellation Proceeding Filed Against Loparex's German Counterpart to the '269 Patent.

26. On April 19, 2012, Buergofol filed a cancellation proceeding against German Patent No. DE 202010016048 ("German Cancellation Proceeding").

27. German Patent No. DE 202010016048 has the same invention disclosure and the same named inventor as the '269 Patent.

28. German Patent No. DE 202010016048 claims priority to the same German patent application as the '269 Patent (German Application No. DE 102010023764).

29. In the German Cancellation Proceeding, Buergofol asserted that German Patent No. DE 202010016048 was invalid in view of prior art Buergofol submitted to the German Patent Office.

30. In the German Cancellation Proceeding, Buergofol submitted evidence of Buergofol's sales of film to Saertex occurring more than one year before the earliest effective filing date of the '269 Patent.

31. In the German Cancellation Proceeding, Buergofol submitted prior art patents including DE 60030706T2, DE 102006047779A1, EP 0342897A2, DE 29700236U1, WO2007/054350A1, EP 1155256B1, DE19817413A1, and DE 19924251A1.

C. Buergofol's 2015 Opposition Filed Against Loparex's European Counterpart to the '269 Patent.

32. On January 30, 2015, Buergofol filed an opposition proceeding against European Application No. EP11730556A ("European Opposition Proceeding"). European Application No. EP11730556A has the same invention disclosure and the same named inventor as the '269 Patent.

33. European Application No. EP11730556A claims priority to the same German patent application as the '269 Patent (German Application No. DE 102010023764).

34. In the European Opposition Proceeding, Buergofol asserted that European Application No. EP11730556A was invalid in view of prior art Buergofol submitted to the European Patent Office.

35. In the European Opposition Proceeding, Buergofol submitted evidence of Buergofol's sales of film to Saertex occurring more than one year before the earliest effective filing date of the '269 Patent.

36. In the European Opposition Proceeding, Buergofol offered evidence of Buergofol's sales of film to Brandenburger Liner occurring more than one year before the earliest effective filing date of the '269 Patent.

37. In the European Opposition Proceeding, Buergofol submitted prior art patents including EP0267742, DE19924251, DE29700236, WO2010/033297, WO2007/054350, and DE19817413.

38. In the European Opposition Proceeding, Buergofol submitted a "quality agreement," dated February 15, 2006 ("2006 Quality Agreement").

39. Upon information and belief, the 2006 Quality Agreement was not falsified by Buergofol.

40. The 2006 Quality Agreement states that the inner tubular film supplied to Saertex had a five-layer structure of PA/HV/PA/HV/PE.

41. Upon information and belief, the 2006 Quality Agreement was entered into with Saertex because of quality problems with Buergofol's inner tubular film sold to Saertex.

42. On May 5, 2023, Omega sent a letter to Buergofol regarding Buergofol's cancellation and opposition proceedings filed against the German and European counterparts to the '269 Patent. A true and correct copy of the May 5, 2023, letter is attached as Exhibit D.

43. On May 10, 2023, Omega sent another letter to Buergofol regarding Buergofol's opposition of the European counterpart to the '269 Patent and Buergofol's own prior art sales to Saertex and Brandenburger Liner that was submitted in Buergofol's opposition brief. The May 10, 2023, letter discusses how the '269 Patent is invalid in view of Buergofol's own prior art submitted to the European Patent Office. A true and correct copy of the May 10, 2023, letter along with Attachments 1-3 is attached as Exhibit E.

44. On May 16, 2023, Omega sent another letter to Buergofol regarding Buergofol's opposition to the European counterpart to the '269 Patent and how Buergofol's submitted prior art sales to Saertex invalidated the '882 Patent because the inner tubular film sold to Saertex prior to March 11, 2012, included EBS wax within the outer polyamide layer. A true and correct copy of the May 16, 2023, letter along with Attachments 1-8 is attached as Exhibit F.

D. Buergofol's Film Products Prior to June 15, 2009.

45. Upon information and belief, prior to June 15, 2009, Buergofol offered for sale and sold film having a five-layer sequence of PA/TIE/PA/TIE/PE.

46. Upon information and belief, prior to June 15, 2009, Buergofol offered for sale and sold film having a five-layer sequence of PA/TIE/PA/TIE/PP.

47. Upon information and belief, prior to June 15, 2009, Buergofol offered for sale and sold film having a five-layer sequence of PA/EVOH/PA/TIE/PE.

48. Upon information and belief, prior to June 15, 2009, Buergofol offered for sale and sold film having a five-layer sequence of PA/EVOH/PA/TIE/PP.

49. Upon information and belief, prior to June 15, 2009, Buergofol offered for sale and sold film having a seven-layer sequence of PA/TIE/PA/EVOH/PA/TIE/PE.

50. Upon information and belief, prior to June 15, 2009, Buergofol offered for sale and sold film having a seven-layer sequence of PA/TIE/PA/EVOH/PA/TIE/PP.

51. Upon information and belief, prior to June 15, 2009, Buergofol made film having a five-layer sequence of PA/TIE/PA/TIE/PE.

52. Upon information and belief, prior to June 15, 2009, Buergofol made film having a five-layer sequence of PA/TIE/PA/TIE/PP.

53. Upon information and belief, prior to June 15, 2009, Buergofol made film having a five-layer sequence of PA/EVOH/PA/TIE/PE.

54. Upon information and belief, prior to June 15, 2009, Buergofol made film having a five-layer sequence of PA/EVOH/PA/TIE/PP.

55. Upon information and belief, prior to June 15, 2009, Buergofol made film having a seven-layer sequence of PA/TIE/PA/EVOH/PA/TIE/PE.

56. Upon information and belief, prior to June 15, 2009, Buergofol made film having a seven-layer sequence of PA/TIE/PA/EVOH/PA/TIE/PP.

57. Upon information and belief, prior to June 15, 2009, Buergofol's website stated that Buergofol had a five-layer medium barrier film having a layer sequence of PE/TIE/PA/TIE/PE.

58. Upon information and belief, prior to June 15, 2009, Buergofol's website stated that Buergofol had a five-layer medium barrier film having the following a layer sequence of PE/TIE/PA/TIE/PP.

59. Upon information and belief, prior to June 15, 2009, Buergofol's website stated that Buergofol had a five-layer high barrier film having a layer sequence of PA/EVOH/PA/TIE/PE.

60. Upon information and belief, prior to June 15, 2009, Buergofol's website stated that Buergofol had a five-layer high barrier film having a layer sequence of PA/EVOH/PA/TIE/PP.

61. Upon information and belief, prior to June 15, 2009, Buergofol's website stated that Buergofol had a seven-layer high barrier film having a layer sequence of PA/TIE/PA/EVOH/PA/TIE/PE.

62. Upon information and belief, prior to June 15, 2009, Buergofol's website stated that Buergofol had a seven-layer high barrier film having a layer sequence of PA/TIE/PA/EVOH/PA/TIE/PP.

E. Buergofol's Sales of Film for UV CIPP Liners.

63. Upon information and belief, before June 15, 2009, Buergofol made 5-layer tubular films for use as inner tubular films for the production of UV CIPP liners.

64. Upon information and belief, before June 15, 2009, Buergofol made inner tubular film having a layer sequence made of (a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, as one of the external layers, (b) an adhesive-promoter layer (b), (c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide, (d) an adhesive-promoter layer (d), and (e) a layer (e) comprised of at least one homo- and/or copolyamide, as one of the external layers, in the form of a tubular film.

65. Upon information and belief, before June 15, 2009, Buergofol sold inner tubular film having a layer sequence made of (a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, as one of the external layers, (b) an adhesive-promoter layer (b), (c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide, (d) an adhesive-promoter layer (d), and (e) a layer (e) comprised of at least one homo- and/or copolyamide, as one of the external layers, in the form of a tubular film.

66. Upon information and belief, before June 15, 2009, Buergofol sold five-layer tubular film to Saertex multiCom.

67. Upon information and belief, before June 15, 2009, Buergofol knew Saertex was using the five-layer tubular film from Buergofol to manufacture CIPP liners.

68. Upon information and belief, before June 15, 2009, Buergofol knew Saertex was selling and shipping CIPP liners made with Buergofol's five-layer tubular film into the United States.

69. Upon information and belief, before June 15, 2009, Buergofol sold to Saertex multiCom inner tubular film having a layer sequence made of (a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, as one of the external layers, (b) an adhesive-promoter layer (b), (c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide, (d) an adhesive-promoter layer (d), and (e) a layer (e) comprised of at least one homo- and/or copolyamide, as one of the external layers, in the form of a tubular film.

70. Upon information and belief, before June 15, 2009, Buergofol shipped to a UV CIPP liner manufacturer in the United States inner tubular film having a layer sequence made of (a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, as one of the external layers, (b) an adhesive-promoter layer (b), (c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide, (d) an adhesive-promoter layer (d), and (e) a layer (e) comprised of at least one homo- and/or copolyamide, as one of the external layers, in the form of a tubular film.

71. Upon information and belief, Buergofol made an inner tubular film for use in a UV cured-in-place-pipe (CIPP) liner having a five-layer structure of PA/HV/PA/HV/PE.

72. On or about March 2002, Buergofol completed an order from Saertex multiCom for five-layer inner tubular film having a layer structure of PA/HV/PA/HV/PE.

73. On or about March 2002, Buergofol completed an order from Saertex multiCom for five-layer inner tubular film having an external layer having a first constituent of ULTRAMID brand polyamide and a second constituent of NOVAMID brand polyamide.

74. On or about March 2002, Buergofol made and delivered to Saertex multiCom GmbH a five-layer inner tubular film.

75. On or about March 2002, Buergofol made and delivered to Saertex multiCom GmbH an inner tubular film having an external layer that included an amount of ULTRAMID brand polyamide from BASF.

76. On or about March 2002, Buergofol made and delivered to Saertex multiCom GmbH an inner tubular film having an external layer that included EBS wax.

77. Upon information and belief, all ULTRAMID brands of polyamide from BASF prior to March 11, 2012, included an amount of EBS wax.

78. Upon information and belief, BASF used EBS wax as a lubricant in ULTRAMID brand polyamide prior to March 11, 2012.

79. Upon information and belief, before March 11, 2012, Buergofol used ULTRAMID brand polyamide from BASF to manufacture at least some amounts of inner tubular film.

80. Upon information and belief, before March 11, 2012, Buergofol used ULTRAMID brand polyamide from BASF to manufacture at least some amounts of film identified by Buergofol as ERGO.VAC-34A0004.

81. Upon information and belief, before March 11, 2012, Buergofol used ULTRAMID brand polyamide from BASF to manufacture at least some amounts of film identified by Buergofol as ERGO.VAC-34C0004.

82. Upon information and belief, before March 11, 2012, Buergofol had knowledge that ULTRAMID brand polyamide included EBS wax.

83. Upon information and belief, Buergofol has extrusion sheets for inner tubular film sold to UV CIPP liner manufacturers dated before March 11, 2012.

84. Upon information and belief, Buergofol has extrusion sheets for inner tubular film sold to Saertex multiCom dated before March 11, 2012.

85. Upon information and belief, Buergofol has extrusion sheets for inner tubular film sold to Brandenburger Liner GmbH & Co. KG dated before March 11, 2012.

86. Upon information and belief, from at least January 1, 2000, to June 14, 2009, Buergofol was the exclusive supplier of internal multilayer foils to Saertex multiCom.

87. Upon information and belief, from at least January 1, 2000, to June 14, 2009, Buergofol was the exclusive supplier of internal multilayer foils to Brandenburger Liner GmbH & Co. KG.

88. Upon information and belief, prior to June 15, 2009, Buergofol knew that Brandenburger liner sold and shipped CIPP liners to customers in the United States.

89. Upon information and belief, prior to June 15, 2009, Buergofol sold and delivered to Brandenburger Liner GmbH & Co. KG five-layer inner tubular film having a layer structure of PA/HV/PA/HV/PE.

90. Upon information and belief, prior to March 11, 2012, Buergofol sold and delivered to Brandenburger Liner GmbH & Co. KG inner tubular film having an outer layer that included ULTRAMID brand polyamide.

91. Upon information and belief, prior to March 11, 2012, Buergofol has purchased ULTRAMID brand polyamide.

92. Upon information and belief, prior to March 11, 2012, Buergofol has used ULTRAMID brand polyamide to manufacture tubular film.

93. Light Stream Inc. (“Light Stream”) was a UV CIPP liner manufacturer located in the United States.

94. Light Stream has purchased inner tubular film from Buergofol prior to March 11, 2012.

95. On March 27, 2023, Omega sent a letter to Buergofol regarding Buergofol’s prior art sales and shipments of inner tubular film to Light Stream prior to March 11, 2012. A true and correct copy of the March 27, 2023, letter is attached as Exhibit A.

96. Buergofol shipped inner tubular film to Light Stream prior to March 11, 2012.

97. Upon information and belief, from June 30, 2009 to March 11, 2012, Buergofol was the exclusive supplier of internal tubular film to Light Stream.

98. Prior to March 11, 2012, Buergofol sold and delivered to Light Stream inner tubular film having a layer structure of PA/HV/PE.

99. Upon information and belief, prior to March 11, 2012, Buergofol sold and delivered to Light Stream inner tubular film having an outer layer that included ULTRAMID brand polyamide.

100. Upon information and belief, Buergofol has extrusion sheets for inner tubular film sold to Light Stream dated before March 11, 2012.

101. Before March 11, 2012, Buergofol sold ERGO.VAC-34A0004 to Light Stream.

102. Upon information and belief, before March 11, 2012, Buergofol used ULTRAMID brand polyamide from BASF to manufacture at least some amounts of film identified by Buergofol as ERGO.VAC-34A0004 sold to Light Stream.

103. Before March 11, 2012, Buergofol shipped inner tubular film including wax within the outer polyamide layer to Light Stream.

104. In 2011, Light Stream placed an order for inner tubular film from Buergofol identified as Order No. 11104751.

105. In 2011, Buergofol sold and shipped inner tubular film to Light Stream pursuant to Order No. 11104751.

106. Prior to March 11, 2012, Buergofol shipped inner tubular film to Light Stream using EMO-Trans GmbH.

107. In 2009, Buergofol shipped inner tubular film to Light Stream having a Bill of Lading No. SHKK276503957641.

108. In 2009, Buergofol shipped inner tubular film to Light Stream having a Bill of Lading No. NYKS520065106001.

109. In 2010, Buergofol shipped inner tubular film to Light Stream having a Bill of Lading No. ETGE915554.

110. In 2010, Buergofol shipped inner tubular film to Light Stream having a Bill of Lading No. ETGE915887.

111. In 2011, Buergofol shipped inner tubular film to Light Stream having a Bill of Lading No. ETGE926053.

112. In 2011, Buergofol shipped inner tubular film to Light Stream having a Bill of Lading No. ETGE928209.

113. International Pipelining Technologies, Inc. ("International Pipelining") was a UV CIPP liner manufacturer located in the United States.

114. International Pipelining has purchased inner tubular film from Buergofol prior to March 11, 2012.

115. Buergofol has shipped inner tubular film to International Pipelining prior to March 11, 2012.

116. Upon information and belief, from June 30, 2009 to March 11, 2012, Buergofol was the exclusive supplier of internal tubular film to International Pipelining.

117. Prior to March 11, 2012, Buergofol sold and delivered to International Pipelining inner tubular film having a layer structure of PA/HV/PE.

118. In 2008, International Pipelining placed an order for inner tubular film from Buergofol identified as Order No. 10802804.

119. In 2008, Buergofol sold and shipped inner tubular film to International Pipelining located in the United States pursuant to Order No. 10802804.

120. Upon information and belief, prior to March 11, 2012, Buergofol sold and delivered to International Pipelining inner tubular film having an outer layer that included ULTRAMID brand polyamide.

121. Upon information and belief, Buergofol has extrusion sheets for inner tubular film sold to International Pipelining dated before March 11, 2012.

122. Before March 11, 2012, Buergofol sold ERGO.VAC-34A0004 to International Pipelining.

123. Upon information and belief, before March 11, 2012, Buergofol used ULTRAMID brand polyamide from BASF to manufacture at least some amounts of film identified by Buergofol as ERGO.VAC-34A0004 sold to International Pipelining.

124. Before March 11, 2012, Buergofol shipped inner tubular film, including wax within the outer polyamide layer to International Pipelining.

F. The '882 Patent.

125. On March 11, 2014, Buergofol filed U.S. Application No. 14/204,205, which issued on May 23, 2017, as U.S. Patent No. 9,657,882.

126. The food packaging field is one field of application for the tubular film disclosed in the '882 Patent.

127. The '882 Patent states on column 10, lines 47-56, that “Other fields of application of the tubular film according to the invention pertain to its use as packaging material for the so-called non-food sector or for food, especially as lid and/or bottom film, as shrink wrap or skin film, as film for so-called bag-in-box packaging or as tubular bag. Additionally, the tubular film according to the invention can be used as release or release film against sticky substances and also as surface-protecting film or for protective suits, as covering film, 55 agricultural film or as dirt-resistant tubular film in the construction industry.”

128. The application for the '882 Patent includes the following false statement on column 2, lines 63-67: “In the films according to the invention, it came as a surprise to discover that a good release effect against adhesive resins is also accompanied by a reduction of the coefficients of friction of film against film. Such a result was unexpected.” The inventors (Dr. Kurt Stark, Gregor Schleicher, and Abdel-Kader Boutrid) knew that this statement was false at the time of filing the application for the '882 Patent because they knew that adding a wax or other type of “migrating compound” either within the outer polyamide layer of the inner tubular film or applied over the external side of the inner tubular film would provide a good release effect against adhesive resins and also a reduction in coefficients of friction of film against film.

129. The application for the '882 Patent includes the following false statement on column 2, lines 30-34: "Going back to the tubular liner and, in particular, to its inner tube film, a disadvantage of the PE/PA or PE/AP/PA film (AP: adhesion promoter) used so far as inner tube film mentioned above is its excessively low release effect against adhesive resins." The inventors (Dr. Kurt Stark, Gregor Schleicher, and Abdel-Kader Boutrid) knew that this statement was false at the time of filing the application for the '882 Patent because they knew that conventional prior art inner tubular film did not have an excessive low release effect against adhesive resins.

130. The application for the '882 Patent includes the following false statement on column 2, lines 40-43: "Regarding their release effect towards resins or adhesive substances, the inner tube films known to date are, by and large in need of improvement." The inventors (Dr. Kurt Stark, Gregor Schleicher, and Abdel-Kader Boutrid) knew that this statement was false at the time the application for the '882 Patent was filed because they knew that conventional prior art inner tubular film did not have any problems with their release effect towards resins or adhesive substances that needed any improvement.

131. Prior to the issuance of the '882 Patent on May 23, 2017, Buergofol and/or its counsel knew about material prior art that was not disclosed to the U.S. Patent & Trademark Office ("USPTO").

132. Prior to the issuance of the '882 Patent, Buergofol knew about Publication No. WO 2011/054434 (Schumann). Publication NO. WO 2011/054434 is referenced in a May 6, 2013, license agreement between Buergofol and Dr. Kurt Stark.

133. Buergofol did not disclose Publication No. WO 2011/054434 to the USPTO during the prosecution of U.S. Application No. 14/204,205.

134. Upon information and belief, prior to the issuance of the '882 Patent, Buergofol knew that Dr. Kurt Stark was a named inventor in Publication No. WO 2011/054434.

135. Upon information and belief, Buergofol knew prior to March 11, 2012, that polyamide resin pellets included at least one lubricant such as, but not limited to, wax.

136. Upon information and belief, prior to filing this lawsuit, Buergofol knew that the polyamide layer of inner tubular film manufactured by Buergofol before March 11, 2012, for UV CIPP liners included at least one lubricant such as, but not limited to, wax.

137. Upon information and belief, prior to filing this lawsuit, Buergofol knew that the polyamide layer of inner tubular film manufactured by Sudpack before March 11, 2012, for UV CIPP liners included at least one lubricant such as, but not limited to, wax.

138. Upon information and belief, prior to filing this lawsuit, Buergofol knew that Buergofol's ERGO.VAC-34A0004 inner tubular film manufactured prior to March 11, 2012, included at least one lubricant such as, but not limited to, wax.

139. Upon information and belief, prior to filing this lawsuit, Buergofol knew that lubricants were present in polyamide resin pellets used to manufacture certain inner tubular film for CIPP liners prior to March 11, 2012.

140. Upon information and belief, prior to filing this lawsuit, Buergofol knew that wax was present in polyamide resin pellets used to manufacture inner tubular film for CIPP liners prior to March 11, 2012.

141. Upon information and belief, prior to filing this lawsuit, Buergofol knew that film manufactured prior to March 11, 2012, with an outer polyamide layer had wax present in the outer polyamide layer.

142. Buergofol did not disclose to the USPTO during the prosecution of the '882 Patent its knowledge of the use of lubricants, such as wax, in polyamide resin pellets in existence prior to March 11, 2012.

143. Buergofol did not disclose to the USPTO during the prosecution of the '882 Patent its knowledge of the presence of lubricants, such as wax, in the outer polyamide layer of inner tubular film used to manufacture UV CIPP liners.

144. The “external tubular film” of claim 1 of the '882 Patent is “opaque.”

145. The “coating” of claim 1 of the '882 Patent is “applied over a section of or an entire circumferential area of the outer facing external side facing the carrier material.”

146. Claim 3 of the '882 Patent specifies “a layer that contains a thermoplastic elastomer (TPE).”

147. A co-polyamide is not a thermoplastic elastomer.

G. The 2012 Sudpack Film.

148. SÜDPACK Verpackungen GmbH & Co. KG (“Sudpack”) is a film manufacturer and direct competitor to Buergofol.

149. Upon information and belief, in 2014, Buergofol acquired a sample of Sudpack’s inner film made in 2012 (“2012 Sudpack film”).

150. Upon information and belief, Buergofol acquired the 2012 Sudpack film from Stefan Reichel of RelineEurope AG.

151. Upon information and belief, the 2012 Sudpack film was used in a CIPP liner manufactured by IMPREG GmbH LLC (“Impreg”).

152. Upon information and belief, in or about July 2020, Buergofol provided at least a portion of the 2012 Sudpack film to BASF in a meeting at Buergofol’s headquarters in Siegenburg, Germany.

153. Upon information and belief, during the July 2020 meeting with BASF, a BASF representative informed Buergofol that EBS wax and similar lubricants were commonly used in polyamide resin pellets prior to the earliest effective filing date of the '882 Patent.

154. Upon information and belief, during the July 2020 meeting with BASF, a BASF representative informed Buergofol that all polyamide from BASF included 400 ppm EBS wax.

155. Upon information and belief, Buergofol believed that the 2012 Sudpack film had an outer polyamide layer made from BASF's ULTRAMID C33LN after a first analysis of the 2012 Sudpack film by BASF performed in August 2020.

156. In or about August 2020, BASF informed Buergofol that BASF's ULTRAMID brand polyamide had EBS wax as an additive.

157. Upon information and belief, prior to filing its complaint in this lawsuit, Buergofol had the 2012 Sudpack film tested for the presence of wax within the outer polyamide layer.

158. Upon information and belief, Dr. Kurt Stark requested the test of the 2012 Sudpack film to be performed after September 1, 2020, but before December 31, 2020.

159. Upon information and belief, prior to filing this lawsuit, Buergofol knew the 2012 Sudpack film had wax within the outer polyamide layer.

160. On May 30, 2023, Omega sent a letter to Buergofol regarding Buergofol's knowledge of the 2012 prior art Sudpack film sample and how Buergofol knew prior to filing this lawsuit that the 2012 prior art Sudpack film included EBS wax within the outer polyamide layer. A true and correct copy of the May 30, 2023, letter along with Attachments 1-5 is attached as Exhibit G.

H. Buergofol's Sales of Film to Omega.

161. From June 2017 through May 2019, Buergofol sold inner film and outer film to Omega.

162. Buergofol sold the film to Omega knowing that Omega was purchasing the film to manufacture UV CIPP liners.

163. Prior to each shipment of film by Buergofol to Omega, Buergofol knew of the '882 Patent.

164. Buergofol did not inform Omega of the '882 Patent prior to Buergofol shipping film to Omega.

165. Prior to each shipment of film by Buergofol to Omega, Buergofol knew of the '269 Patent.

166. Buergofol did not inform Omega about the '269 Patent prior to Buergofol shipping film to Omega.

I. Buergofol's Litigation with Dr. Kurt Stark.

167. Upon information and belief, Buergofol is involved in one or more legal proceedings with Dr. Kurt Stark relating to the '269 Patent and/or the '882 Patent.

168. Upon information and belief, Buergofol is involved in ongoing litigation with Dr. Kurt Stark in Germany in Case No. 7O10640/21 before the 7th Civil Chambers of the Landgericht München I, which in part relates to at least the '269 Patent and/or the '882 Patent.

169. Upon information and belief, Buergofol is involved in ongoing litigation with Dr. Kurt Stark in Case No. 6U2188/22 before the Civil Department of the Oberlandesgericht München, which in part relates to at least the '269 Patent and/or the '882 Patent.

170. Upon information and belief, Buergofol is involved in at least one litigation case with Dr. Kurt Stark relating to the scope, term, and effectiveness of a license agreement dated May 6, 2013, between Dr. Kurt Stark and Buergofol.

171. Upon information and belief, the May 6, 2013, license between Buergofol and Dr. Kurt Stark relates to the '269 Patent and/or the '882 Patent.

J. Present Patent Infringement Lawsuit.

172. On August 15, 2022, Buergofol filed a complaint against Omega in the above-captioned litigation.

173. On July 13, 2023, Buergofol filed the First Amended Complaint for Patent Infringement (“First Amended Complaint”) in the above-captioned litigation.

174. According to the allegations set forth in its First Amended Complaint, Buergofol alleges it is the owner of the Patents-in-Suit.

175. In the First Amended Complaint, Buergofol alleges Omega infringed and/or is infringing the Patents-in-Suit.

176. Omega denies that any of its products infringe any valid or enforceable claim of any of the Patents-in-Suit.

177. Omega has informed Buergofol that the Patents-in-Suit are invalid and unenforceable a number of times.

178. An actual case and controversy exists between Omega and Buergofol concerning the alleged infringement of one or more claims of the Patents-in-Suit, and that controversy is ripe for adjudication by this Court.

FIRST COUNTERCLAIM
(Declaratory Judgment of Non-Infringement of the '882 Patent)

179. Omega incorporates all preceding paragraphs of Omega’s Counterclaims as if fully set forth herein.

180. An actual controversy exists between Omega and Buergofol as to whether Omega infringes the '882 Patent, as Buergofol contends, or does not do so, as Omega contends.

181. Omega has been damaged by Buergofol’s filing of a lawsuit against Omega based on a patent that Omega does not infringe.

182. By this Counterclaim, Omega seeks a declaration that it has not infringed and does not infringe any valid and enforceable claim of the '882 Patent either directly or indirectly, literally or under the doctrine of equivalents, or willfully, and is entitled to a declaration to that effect.

183. A judicial declaration is necessary and appropriate at this time so that Omega may ascertain its rights and duties with respect to the '882 Patent, and with respect to any past, present, or future manufacture, use, importation, distribution, sale, or offer for sale of its products.

SECOND COUNTERCLAIM
(Declaratory Judgment of Non-Infringement of the '269 Patent)

184. Omega incorporates all preceding paragraphs of Omega's Counterclaims as if fully set forth herein.

185. An actual controversy exists between Omega and Buergofol as to whether Omega infringes the '269 Patent, as Buergofol contends, or does not do so, as Omega contends.

186. Omega has been damaged by Buergofol's filing of a lawsuit against Omega based on a patent that Omega does not infringe.

187. By this Counterclaim, Omega seeks a declaration that it has not infringed and does not infringe any valid and enforceable claim of the '269 Patent either directly or indirectly, literally or under the doctrine of equivalents, or willfully, and is entitled to a declaration to that effect.

188. A judicial declaration is necessary and appropriate at this time so that Omega may ascertain its rights and duties with respect to the '269 Patent, and with respect to any past, present, or future manufacture, use, importation, distribution, sale, or offer for sale of its products.

THIRD COUNTERCLAIM
(Declaratory Judgment of Invalidity of the '882 Patent)

189. Omega incorporates all preceding paragraphs of Omega's Counterclaims as if fully set forth herein.

190. An actual controversy exists between Omega and Buergofol as to whether the '882 Patent is valid, as Buergofol contends, or is invalid for failure to comply with the requirements of patentability of the Patent Laws of the United States, Title 35 of the United States Code, including, but not limited to, 35 U.S.C. §§ 102, 103, 111, 112, 115, 116, 119, 132, 251, 256, and/or 282, as Omega contends.

191. By this Counterclaim, Omega seeks a declaration that the claims of the '882 Patent are invalid. A judicial declaration is necessary and appropriate at this time so that Omega may ascertain its rights and duties with respect to the '882 Patent, and with respect to any past, present, or future manufacture, use, importation, distribution, sale, or offer for sale of its products.

FOURTH COUNTERCLAIM
(Declaratory Judgment of Invalidity of the '269 Patent)

192. Omega incorporates all preceding paragraphs of Omega's Counterclaims as if fully set forth herein.

193. An actual controversy exists between Omega and Buergofol as to whether the '269 Patent is valid, as Buergofol contends, or is invalid for failure to comply with the requirements of patentability of the Patent Laws of the United States, Title 35 of the United States Code, including, but not limited to, 35 U.S.C. §§ 102, 103, 111, 112, 115, 116, 119, 132, 251, 256, and/or 282, as Omega contends.

194. By this Counterclaim, Omega seeks a declaration that the claims of the '269 Patent are invalid. A judicial declaration is necessary and appropriate at this time so that Omega may ascertain their rights and duties with respect to the '269 Patent, and with respect to any past, present, or future manufacture, use, importation, distribution, sale, or offer for sale of its products.

FIFTH COUNTERCLAIM
(Declaratory Judgment of Unenforceability of the '882 Patent)

195. Omega incorporates all preceding paragraphs of Omega's Counterclaims as if fully set forth herein.

196. As a result of the acts described in the preceding paragraphs, there exists a controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment of unenforceability.

197. A judicial declaration is necessary and appropriate so that Omega may ascertain its rights regarding the enforceability of the '882 Patent.

198. Omega is entitled to a declaratory judgment that the '882 Patent is unenforceable due to inequitable conduct before the United States Patent and Trademark Office (USPTO) as further described with particularity below.

199. The USPTO issued a Notice of Allowance to Buergofol on January 25, 2017 with respect to the patent application for the '882 Patent which included a section titled "Reasons for Allowance."

200. 37 C.F.R. § 1.104(e) provides that the examiner may set forth the "reasons for allowance," providing the following:

(e) Reasons for allowance. If the examiner believes that the record of the prosecution as a whole does not make clear his or her reasons for allowing a claim or claims, the examiner may set forth such reasoning. The reasons shall be incorporated into an Office action rejecting other claims of the application or patent under reexamination or be the subject of a separate communication to the applicant or patent owner. The applicant or patent owner may file a statement commenting on the reasons for allowance within such time as may be specified by the examiner. Failure by the examiner to respond to any statement commenting on reasons for allowance does not give rise to any implication.

201. In the January 25, 2017 Notice of Allowance, the examiner stated in the Reasons for Allowance section the following reasons for allowing the patent application that resulted in the '882 Patent:

WO 98/12465 is the closest prior art but does not disclose wherein the inner tubular film comprises one or multiple layers an inner facing external side and an outer facing external side facing the carrier material, a coating of at least one of (1) a coating with a polysiloxane, or (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material.

202. After receiving the Notice of Allowance with the Reasons for Allowance, Buergofol did not file with the USPTO any statements or comments (a) relating to the examiner's Reasons for Allowance in the Notice of Allowance, (b) setting forth any disagreement with the examiner's reasons for allowance, or (c) clarifying or correcting the examiner's reasons for allowance.

203. The inventors, Kurt Stark, Gregor Schleicher, and Abdel-Kader Boutrid, were all substantively involved in the preparation and prosecution of the application for the '882 Patent. Upon information and belief, Dr. Franz Schleicher, who is an owner of Buergofol, was also substantively involved in the preparation and prosecution of the application for the '882 Patent.

204. Independent claim 1 of the '882 Patent has the claim limitation of "a coating of at least ... (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material" ("Missing Claim Limitation"). Claim 10 is dependent from claim 1 and requires "wherein the coating is a coating or covering with at least one migrating compound, and the migrating compound is one of: (1) a lipophilic compound from the group of a wax, paraffin, fatty acid, or a fat."

205. Buergofol construes the Missing Claim Limitation in independent claim 1 to include an outer layer of the inner tubular film that includes a “migrating compound” such as a “wax” (e.g., “EBS wax”) that migrates to the exterior surface of the inner tubular film to create a coating on the exterior surface and alleges that Omega infringes the ’882 Patent because Omega’s outer layer in the inner tubular film allegedly includes a “migrating compound” of “wax” and more specifically “EBS wax.”

206. The examiner stated in the Reasons for Allowance of the Notice of Allowance for the ’882 Patent that the Missing Claim Limitation was absent from the information of record and specifically stated that “WO 98/12465 is the closest prior art but does not disclose ... a coating of at least ... (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material.”

207. In 2008, Buergofol sold and shipped multilayer inner tubular film having multiple layers to International Pipelining located in the United States pursuant to Order No. 10802804 (“2008 Prior Art Film”). In 2011, Buergofol sold and shipped multilayer inner tubular film having multiple layers to Light Stream Inc. located in the United States pursuant to Order No. 11104751 (“2011 Prior Art Film”).

208. The 2008 Prior Art Film and the 2011 Prior Art Film sold and shipped to International Pipelining and Light Stream respectively all included a “migrating compound” within the outer layer (a polyamide layer) of the inner tubular film that faces the carrier material of the UV CIPP liner. The “migrating compound” within the outer layer of the 2008 Prior Art Film was a wax. The “migrating compound” of wax migrated to the external side of the inner tubular film

facing the carrier material thereby creating a “coating” that covered the entire circumferential area of the external side of the 2008 Prior Art Film facing the carrier material of the UV CIPP liner.

209. Upon information and belief, at all times from the filing date to the issue date of the '882 Patent, despite knowing about the materiality of the 2008 Prior Art Film and the 2011 Prior Art Film sales and shipments into the United States prior to the March 11, 2012 critical date of the '882 Patent, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher intentionally deceived the USPTO by not disclosing to the USPTO these sales and shipments into the United States which they knew were material to the patentability of the '882 Patent and would have prevented issuance of the '882 Patent.

210. Upon information and belief, Dr. Kurt Stark was the Director of Business Development at Buergofol from October 2011 until at least the May 23, 2017 issue date of the '882 Patent and has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

211. Upon information and belief, Abdel-Kader Boutrid has been employed by Buergofol since 1998 to present as the Head of Research and Development where he has been responsible for product development and quality control including overseeing how films are manufactured by Buergofol including inner tubular film used for making UV CIPP pipe liners. Upon information and belief, Abdel-Kader Boutrid has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

212. Upon information and belief, Gregor Schleicher has been the Technical Manager of Buergofol since March 2004 to present, and has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

213. Upon information and belief, Dr. Franz Schleicher has been an owner and CEO of Buergofol since at least 1998 to present, and has in-depth knowledge of the product development, composition, sales and shipments of Buergofol's inner tubular film for CIPP liners prior to the March 11, 2012 critical date of the '882 Patent including the 2008 Prior Art Film and the 2011 Prior Art Film.

214. Therefore, upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher all knew about the 2008 Prior Art Film and 2011 Prior Art Film sales and shipments to International Pipelining and Light Stream in the United States. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew the 2008 Prior Art Film and the 2011 Prior Art Film included a "migrating compound" within the outer layer of the film. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew that the "migrating compound" within the outer layer of the film was wax.

215. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew the 2008 Prior Art Film and the 2011 Prior Art Film sales and shipments were material to the patentability of claim 1 of the '882 Patent and made a deliberate decision to withhold the 2008 Prior Art Film and the 2011 Prior Art Film sales and shipments into the United States.

216. Upon information and belief, Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher knew that if the 2008 Prior Art Film and the 2011 Prior Art Film were disclosed to the USPTO during prosecution of the application for the '882 Patent, the USPTO examiner would have used the 2008 Prior Art Film and the 2011 Prior Art Film with the “migrating compound” of wax within the outer layer to find at least independent claim 1 unpatentable in view of the cited prior art references disclosing CIPP liners including International Publication No. WO 98/12465. A USPTO examiner would have found it obvious for a person of ordinary skill in the art (“POSITA”) to combine the inner tubular film of the 2008 Prior Art Film and the 2011 Prior Art Film to replace the inner tubular film of International Publication No. WO 98/12465. The USPTO examiner would have found that a POSITA would be motivated to use the 2008 Prior Art Film and 2011 Prior Art Film with predictable results as the inner tubular film of the CIPP liner disclosed in International Publication No. WO 98/12465 to have a removable inner tubular film that does not stick to the cured resin thereby allowing for removal of the inner tubular film from the cured resin. The 2008 Prior Art Film and the 2011 Prior Art Film are material prior art to the '882 Patent and the USPTO would not have allowed at least independent claim 1 of the '882 Patent but for the intentional withholding prior art sales and shipments of the 2008 Prior Art Film and the 2011 Prior Art Film by Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher.

217. The 2008 Prior Art Film and the 2011 Prior Art Film are not cumulative of other information considered by the USPTO examiner. The USPTO examiner specifically found and stated in the Reasons for Allowance in the Notice of Allowance that the following limitation in independent claim 1 was missing from the prior art references:

wherein the inner tubular film comprises one or multiple layers an inner facing external side and an outer facing external side facing the carrier material, a coating of at least one

of (1) a coating with a polysiloxane, or (2) a coating or covering with at least one migrating compound, and wherein the coating is applied over a section of or an entire circumferential area of the external side faces facing the carrier material.

218. The 2008 Prior Art Film and the 2011 Prior Art Film sold and shipped into the United States prior to the March 11, 2012 critical date of the '882 Patent both include this missing limitation because of the "migrating compound" (i.e., wax) within the outer polyamide layer that faces the resin and carrier material. The 2008 Prior Art Film and the 2011 Prior Art Film are not cumulative of any of the prior art references disclosed to the USPTO during prosecution of the '882 Patent and therefore are material to the patentability of at least independent claim 1.

219. The '882 Patent is invalid, void, or unenforceable for the above-said inequitable conduct during the prosecution of the '882 Patent by Dr. Kurt Stark, Gregor Schleicher, Abdel-Kader Boutrid and Dr. Franz Schleicher.

220. Upon information and belief, had this intentional misrepresentation not been made to the USPTO, at least independent claim 1 of the '882 Patent would not have been allowed.

SIXTH COUNTERCLAIM
(Declaratory Judgment of Unenforceability of the '269 Patent)

221. Omega incorporates all preceding paragraphs of Omega's Counterclaims as if fully set forth herein.

222. As a result of the acts described in the preceding paragraphs, there exists a controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment of unenforceability.

223. A judicial declaration is necessary and appropriate so that Omega may ascertain its rights regarding the enforceability of the '269 Patent.

224. Omega is entitled to a declaratory judgment that the '269 Patent is unenforceable due to inequitable conduct and fraud before the United States Patent and Trademark Office (USPTO) as further described with particularity below.

225. USPTO issued a Notice of Allowance to Loparex on January 30, 2014 with respect to the patent application for the '269 Patent which included a section titled "Reasons for Allowance."

226. In the January 30, 2014 Notice of Allowance, the examiner stated in the Reasons for Allowance section the following reasons for allowing the patent application that resulted in the '269 Patent:

1. The following is an examiner's statement of reasons for allowance: After a review of the prior art of record, it is believed that the present invention is novel and non-obvious wherein no reference discloses a tube comprising a layer sequence including at least one thermoplastic olefin homo-or copolymer, an adhesion promoter layer, an internally situated layer comprised of at least one homo and/ or copolyamide, a second adhesive-promoter layer and a layer of at least one homo and/ or copolyamide, as an external layer all in the form of a tubular film, with the VICAT softening point of the thermoplastic olefin homo or copolymer of the first layer is at least 100°C, and an externally situated single or multilayer tubular film which is impermeable to liquids and reflects and/ or absorbs UV radiation and/ or short-wave, visible light and a support material situated therebetween and saturated with a reactive synthetic resin, as recited by claim 1.

227. On April 11, 2014, the Chinese Patent Office issued an Office Action rejecting Loparex's Chinese Application No. CN201180029444, the Chinese counterpart to the '269 Patent. The April 11, 2014 Chinese Office Action cited Russian Patent No. RU2182999C1 ("Khramenkov") as the main prior art reference, along with European Application No. EP0342897A2 ("Jones"), as prior art in rejecting the claims of Chinese Application No. CN201180029444. The claims of Chinese Application No. CN201180029444 have substantially the same scope as the allowed claims in the '269 Patent. A certified translation of Russian Patent No. RU2182999C1 is attached hereto as Exhibit H.

228. After receiving the Notice of Allowance with the Reasons for Allowance, Loparex did not file with the USPTO any statements or comments (a) relating to the examiner's Reasons for Allowance in the Notice of Allowance, (b) setting forth any disagreement with the examiner's reasons for allowance, or (c) clarifying or correcting the examiner's reasons for allowance.

229. On April 23, 2014, patent prosecution counsel for Loparex, William C. Gerstenzang, paid the Issue Fee for the application for the '269 Patent.

230. Prior to paying the Issue Fee for the '269 Patent, Mr. Gerstenzang did not file an Information Disclosure Statement pursuant to 37 CFR § 1.97(d).

231. After paying the Issue Fee for the '269 Patent, Mr. Gerstenzang did not file an Information Disclosure Statement under the USPTO's pilot program called Quick Path Information Disclosure Statement (QPIDS).

232. After paying the Issue Fee for the '269 Patent, Mr. Gerstenzang did not file a petition under 37 CFR § 1.313(c)(2) to withdraw the application from issue in order to permit entry of an RCE and a proper Information Disclosure Statement.

233. After paying the Issue Fee, Mr. Gerstenzang did not file a petition under 37 CFR § 1.313(c)(3) to withdraw the application from issue for express abandonment in favor of a continuation application with a proper Information Disclosure Statement.

234. Upon information and belief, Mr. Gerstenzang received a copy of the April 11, 2014 Office Action from the Chinese Patent Office for Loparex's Chinese Application No. CN201180029444 citing Russian Patent No. RU2182999C1 by at least July 14, 2014.

235. Mr. Gerstenzang knew that Russian Patent No. RU2182999C1 was material to the patentability of at least claim 1 of the '269 Patent because Russian Patent No. RU2182999C1 disclosed the three major layers that were missing in the prior art references as stated by the

USPTO examiner in the Reasons for Allowance of the Notice of Allowance. Upon information and belief, on July 14, 2014, Mr. Gerstenzang filed with the USPTO an improper Information Disclosure Statement that identified Russian Patent No. RU2182999C1 in a manner that he reasonably expected would not be considered by the USPTO.

236. The Information Disclosure Statement filed on July 14, 2014 included a copy of Russian Patent No. RU2182999C1 in Russian language and only a translation of the Abstract of Russian Patent No. RU2182999C1. Mr. Gerstenzang did not provide to the USPTO (a) a concise explanation of the relevance of Russian Patent No. RU2182999C1, (b) a complete translation of Russian Patent No. RU2182999C1, or (3) the April 11, 2014 Office Action issued by the Chinese Patent Office in Chinese Application No. CN201180029444.

237. Mr. Gerstenzang reasonably expected that the examiner would not consider either the Information Disclosure Statement nor the Russian Patent No. RU2182999C1 submitted on July 14, 2014 because 37 CFR § 1.97 does not allow for filing of an Information Disclosure Statement after payment of the Issue Fee unless an applicant files the Information Disclosure Statement pursuant to 37 CFR § 1.97(d) which Mr. Gerstenzang did not do. 37 CFR § 1.97(i) states that “If an information disclosure statement does not comply with either this section or § 1.98, it will be placed in the file but will not be considered by the Office.” Therefore, Russian Patent No. RU2182999C1 was never considered by the USPTO which is what Mr. Gerstenzang reasonably expected would occur because of his filing of the Information Disclosure Statement and Russian Patent No. RU2182999C1 in a manner that did not comply with 37 CFR § 1.97.

238. On August 5, 2014, the '269 Patent was issued without the USPTO considering Russian Patent No. RU2182999C1.

239. The References Cited section of the '269 Patent does not cite Russian Patent No. RU2182999C1 or the April 11, 2014 Office Action.

240. The examiner did not consider Russian Patent No. RU2182999C1 when determining the patentability of any of the claims of the '269 Patent.

241. The examiner did not consider the April 11, 2014 Office Action issued by the Chinese Patent Office in Chinese Application No. CN201180029444 when determining the patentability of any of the claims of the '269 Patent.

242. The examiner reviewing the '269 Patent for patentability did not consider Russian Patent No. RU2182999C1 in any manner.

243. On April 10, 2023, Omega sent a letter to Buergofol regarding the inequitable conduct by Mr. Gerstenzang relating to Russian Patent No. RU2182999C1 and his intentional withholding from the USPTO Russian Patent No. RU2182999C1 and the Office Action citing Russian Patent No. RU2182999C1 in Loparex's Chinese Application No. CN201180029444, which is the Chinese counterpart application to the '269 Patent. A true and correct copy of the April 10, 2023 letter is attached as Exhibit C.

244. Claim 1 of the '269 Patent claims a five-layer sequence inner tubular film having the following specific five-layer sequence not shown in the information of record at the USPTO:

- (a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, *as one of the external layers*,
- (b) an adhesive-promoter layer (b),
- (c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide,
- (d) an adhesive-promoter layer (d), and

(e) a layer (e) comprised of at least one homo- and/or copolyamide, *as one of the external layers*.

245. Russian Patent No. RU2182999C1 is material to the patentability of claim 1 of the '269 Patent because it discloses the layer sequence claimed in independent claim 1 of the '269 Patent and that identified by the USPTO examiner in the Reasons for Allowance section of the Notice of Allowance.

246. Russian Patent No. RU2182999C1 (Khramenkov), entitled "Method for Applying Hose Lining Onto Inner Surface of Pipeline and Applied Coating," is for "applying of hose lining onto inner surface of pipelines" – i.e., a CIPP liner. (Exhibit H, Cover Page.) Russian Patent No. RU2182999C1 was filed on July 3, 2001, and was published on May 27, 2002. (*Id.*) Russian Patent No. RU2182999C1 therefore qualifies as pre-AIA prior art under 35 U.S.C. § 102(b).

247. Russian Patent No. RU2182999C1 discloses "applying tubular lining onto the inner surface of a pipeline and a lining of the inner surface of a pipeline" – i.e., a CIPP liner for pipes including subterranean sewer pipes. (Exhibit H, p. 3.)

248. Russian Patent No. RU2182999C1 further discloses an inner tubular film that has multiple layers with three main layers of a first external layer of polyamide 6, an intermediate layer of polyamide 12 and a second external layer of a thermoplastic polymeric material (polyethylene and polypropylene). (Exhibit H, Abstract, Figure 1.) There is no required conditioning step in Russian Patent No. RU2182999C1 so it also discloses "an optionally nonconditioned multilayer film." (Exhibit H.)

249. Russian Patent No. RU2182999C1 also discloses material for layer (a) that has a VICAT softening point of at least 100 degrees Celsius as recited in independent claim 1.

250. Russian Patent No. RU2182999C1 discloses a three-layer inner tubular film for a CIPP liner with a major layer sequence that is the same five-layer sequence claimed in independent claim 1 of the '269 Patent that the examiner found to be missing in the prior art references considered by the examiner. Russian Patent No. RU2182999C1 further discloses an outer tubular film and a curable resin between the inner tubular film and the outer tubular film.

251. Russian Patent No. RU2182999C1 also discloses the resin impregnated support material between an inner tubular film (4) and an outer tubular film (5). Khramenkov discloses an external “layer [8] containing as thermoplastic polymeric material mixture of polyethylene with polypropylene.” (Exhibit H, Abstract). Khramenkov further discloses that “Inner layer 8 of inner tubular film 4 comprises a mixture of polyethylene in the amount of 20-40 wt.% with polypropylene in the amount of 80-60 wt.%.” (Exhibit H, p. 6 at col. 1, ll. 20-29, p. 4 at col. 2, ll. 52-60). It is well-known that polypropylene has a higher VICAT than polyethylene. A person of ordinary skill in the art would understand that a mixture of 60% by weight of polypropylene (the lowest amount) and 40% by weight of polyethylene would have a VICAT of approximately 120° C which is greater than 100° C. If a higher portion of the mixture was polypropylene, the VICAT temperature would be higher than 120° C. Khramenkov therefore discloses “wherein the VICAT softening point of the thermoplastic olefin homo- or copolymer of the layer (a) is at least 100° C.” as recited by independent claim 1.

252. Khramenkov discloses an external “layer [8] containing as thermoplastic polymeric material mixture of polyethylene with polypropylene.” (Exhibit H, Abstract and Figure 1.) Khramenkov further discloses that “Inner layer 8 of inner tubular film 4 comprises a mixture of polyethylene in the amount of 20-40 wt.% with polypropylene in the amount of 80-60 wt.%.” (Exhibit H, p. 6 at col. 1, ll. 20-29.) Khramenkov expressly recognizes the “mixture of

polyethylene with polypropylene as a thermoplastic polymer material.” (Exhibit H, p. 5 at col. 2, ll. 19-20.) A person of ordinary skill in the art would understand that polyethylene and polypropylene are thermoplastic polyolefins as recited in layer (a) of claim 1. Khramenkov therefore discloses “(a) a layer (a) comprised of at least one thermoplastic olefin homo- or copolymer, as one of the external layers” as recited by independent claim 1.

253. Khramenkov further discloses an “intermediate layer [7] containing polyamide 12.” (Exhibit H, Abstract, Figure 1, p. 4 at col. 1, ll. 35-40, p. 5 at col. 2, ll. 4-20, p. 7 at col. 1, ll. 25-30.) Khramenkov discloses that the intermediate layer 7 is between the opposing external layers 6 and 8. (*Id.*) Khramenkov therefore discloses “(c) an internally situated layer (c) comprised of at least one homo- and/or copolyamide” as recited by independent claim 1.

254. Khramenkov further discloses a “first outer layer [6] containing polyamide 6.” (Exhibit H, Abstract, Figure 1, p. 4 at col. 1, ll. 31-35, p. 5 at col. 2, ll. 8-11, p. 7 at col. 1, ll. 22-26.) Khramenkov therefore discloses “(e) a layer (e) comprised of at least one homo- and/or copolyamide, as one of the external layers” as recited by independent claim 1.

255. Khramenkov further discloses an internally situated multilayer film that is an “inner tubular film 4.” (Exhibit H, Figure 1, p. 4 at col. 1, ll. 9-30, 50-57, p. 4 at col. 2, ll. 9-17, 53-63, p. 5 at col. 1, ll. 58-63). Khramenkov discloses an outer tubular film 5 surrounding the resin impregnated material and that is in contact with the pipe which “prevents external intrusion of groundwater into uncured tubular lining” to protect the uncured bonding agent (i.e., resin) from absorbing water which “prevents bonding agent from curing.” (Exhibit H, Figure 1, p. 5 at col. 1, ll. 32-42.) The outer tubular film 5 of Khramenkov is therefore impermeable to liquids. Khramenkov does not expressly disclose that the outer tubular film 5 “reflects and/or absorbs UV radiation and/or short-wave, visible light.” However, a person of ordinary skill in the art would

know that all plastic film to some extent reflects and/or absorbs a portion of UV radiation and/or short-wave, visible light. Khramenkov therefore discloses “an externally situated single- or multilayer tubular film which is impermeable to liquids, and which reflects and/or absorbs UV radiation and/or short-wave, visible light, as externally situated tube” as recited in independent claim 1. To the extent that Khramenkov does not disclose this limitation, a person of ordinary skill in the art would have been motivated to use an outer tubular film that reflects and/or absorbs UV radiation and/or short-wave, visible light to prevent premature curing of a UV curable resin – such as the UV curable resin in Jones. A person of ordinary skill in the art would have known that using UV curable resins are desirable because of their increased strength compared to heat curable resins. A person of ordinary skill in the art would have known to use an outer tubular film that reflects and/or absorbs UV radiation and/or short-wave, visible light when using a UV curable resin which would have used known outer film technology in a manner that would be predictable to a person of ordinary skill in the art and yield predictable results – i.e., reflect and/or absorb UV radiation and/or short-wave, visible light thereby preventing the premature hardening of the UV curable resin and allow for extended periods of time of storage. Khramenkov in view of Jones therefore discloses “an externally situated single- or multilayer tubular film which is impermeable to liquids, and which reflects and/or absorbs UV radiation and/or short-wave, visible light, as externally situated tube” as recited by independent claim 1.

256. Khramenkov discloses a “reinforcing tubular lining 2 impregnated with a curing bonding agent is placed between outer 5 and inner 4 three-layer tubular films.” (Exhibit H, Figure 1, p. 5 at col. 1, ll. 64 - col. 2, l. 1, *see also* Abstract, claims 1 and 9, p. 6 at col. 1, ll. 49-51, col. 2, ll. 14-17). Khramenkov in view of Jones therefore discloses “a support material situated therebetween and saturated with a reactive synthetic resin” as recited by independent claim 1.

257. Russian Patent No. RU2182999C1 (Khramenkov) discloses all of the elements missing in the information of record at the USPTO with respect to independent claim 1 of the '269 Patent as discussed above with the exception that it does not expressly disclose the adhesion promoter layers between the three major layers as claimed in independent claim 1 of the '269 Patent. However, adhesion promoter layers between major layers was well known prior to the '269 Patent and are disclosed in European Application No. EP0342897A2 ("Jones") as cited in the Chinese Office Action. Russian Patent No. RU2182999C1 discloses melting the layers together to bond together but a person of ordinary skill in the art would easily understand that the adhesion promoter layers from European Application No. EP0342897A2 (Jones) may be used between the major three layers to adhere together instead of melting and would be motivated to do so because it would be less expensive to manufacture with a one-step manufacturing process, among other benefits.

258. A person of ordinary skill in the art would have found it routine and obvious to use an adhesion-promoter layer between layers 7 and 8 of Khramenkov and layers 6 and 7 of Khramenkov. Page 2 at lines 42-49 of Jones discloses a "bonding layer can be provided between the nylon polymer layer and the weldable synthetic plastics composition." Page 3 at lines 15-20 of Jones further discloses an example embodiment where a "tie layer" is used between the nylon and ionomer layers. A person of ordinary skill in the art would have found it obvious and would have been motivated to use an adhesion-promoter layer, such as the bonding/tie layer of Jones, between layers 7 and 8 of Khramenkov and layers 6 and 7 of Khramenkov instead of melting the layers together to (1) ensure that the layers are fully bonded together, (2) avoid damaging the mechanical properties of the layers by using heat to melt the layers together, (3) avoid the extra unnecessary and costly manufacturing step of heating the layers to melt to together because the

adhesion-promoter layer can be co-extruded together, and (4) efficiently co-extrude all five layers (a)-(e) together in an efficient single process. Using an adhesion promoter layer to bond the layers 7 and 8 of Khramenkov and layers 6 and 7 of Khramenkov together instead of melting the layers together would have been simply combining known prior art elements according to known methods of film manufacture to yield predictable results for a person of ordinary skill in the art. A person of ordinary skill in the art would also know that the simple substitution of an adhesion promoter layer instead of melting the layers together would obtain predictable results with a reasonable expectation of success. Khramenkov in view of Jones therefore discloses “(b) an adhesive-promoter layer (b)” and “(d) an adhesive-promoter layer (d)” as recited by independent claim 1.

259. The April 11, 2014 Office Action issued by the Chinese Patent Office in Chinese Application No. CN201180029444 is material to the patentability of the '269 Patent because it explains in detail how the claims of the Chinese counterpart to the '269 Patent are not patentable in view of Russian Patent No. RU2182999C1 in combination with European Application No. EP0342897A2.

260. For example, the April 11, 2014 Office Action for Chinese Application No. CN201180029444 states (machine translated version downloaded from European Patent Office website at <https://register.epo.org/ipfwretrieve?apn=CN.201180029444.A&lng=en>):

Claims 1-3,6, 10-14, 19-23 is not conform to the regulation of the relevant inventiveness of the Article 22, para. 3 of the Patent Law. Independent claims 1 are not conform to the regulation of the relevant inventiveness of the Article 22, para. 3 of the Patent Law. The said claim is asked for protection one kind and is applicable to the hose that inserts that renovates the underground piping.

D1 (RU2182999C1) discloses a pipeline rehabilitating technique lining (it is applicable to the hose that inserts that renovates the underground piping to correspond the present application). Said lining has outside tubular membrane 5 (it is located outside hose to correspond the present application), solidifiable binder

flooding enhancement layer 2, with the thermoplastic resin layer 3 of 2 rigid connections of solidifiable binder flooding enhancement layer, and the tubular membrane of inside three-layer 4 (said inside three-layer tubular membrane 4 must be that liquid is close, correspond inside hose), said inside three-layer tubular membrane 4 is 6 (the corresponding of comprising polyamide 12 layer (e) of layer in the extroversion in proper order, 7 (corresponds layer (c) of layer constituted by polyamide 12 and 8 (the corresponding layer (a) of layer that form by the mixture of polyethylene and polypropylene. Said inside three-layer tubular membrane 4 can take out after the pipeline rehabilitating technique is accomplished. ...

The technical solution that the said claim was asked for protection is compared with the disclosed technological content of D1, distinguishing feature (1) lies in in the present application respectively being provided with between layer (a) and the layer (c) and layer (c) and layer (e) increasing attaches agent layer, the part is penetrable at least and the multilayer film is to the ultraviolet radiation; Distinguishing feature (2) lie in the thermoplasticity alkene homopolymer or the copolymer on the present application layer (a), have VICAT temperature 100 DEG Cs at least. On the basis of said distinguishing feature, how the technical problem that the present application was actually solved obtains to glue well between each layer, and the hose that inserts of ultraviolet solidification can be realized smoothly in the carrier material layer.

To distinguishing feature (1): D2 (EP0342897A2) discloses a multiply polymer film. Said multiply polymer film contains the nylon layer that has the VICAT temperature that is less than 170 DEG Cs But it becomes the plastic layer with the welded connection and is connected But said welded connection becomes the preferred polyethylene ionic compound of plastic layer But, become to set up the binder layer between the plastic layer on nylon layer and welded connection, modified polyolefin can be adopted in said binder layer, by way of example Modified PE or mechanical properties, modified material is like the maleic anhydride, can contain other layer, like the polyethylene layer But said polyethylene layer can be provided binder layer and welded connection and be become between the plastic layer (but form nylon layer / binder layer / polyethylene layer / welded connection promptly and become to mould, the structure of the bed of material). ... Thus it can be seen that, set up modified polyolefin binder layer between nylon layer and polyolefin layer, the transparent technical feature of part is open by the D2 at least to the ultraviolet radiation for the multilayer film, and the reacting phase is together, all anchoring strength and the smooth solidification of realization response nature resin that improves between each layer of multilayer film, thereby, combine well between each layer of the said inside three-layer tubular membrane 4 of D1 in order to make, the those skilled in the art expect easily D1 said layer 6 and layer and layer between 77 with layer respectively set up the modify binder layer of polyolefin of one deck between 8, and make the tubular membrane of said inside three-layer to be that the part is penetrable at least to the ultraviolet radiation, make the unsaturated polyester resin of solidifiable binder flooding enhancement layer 2 realize ultraviolet solidification smoothly thereby.

To distinguishing feature (2), the those skilled in the art is according to the actual need of the heat resistance of the thermoplasticity alkene homopolymer that improves said layer (a) or copolymer, can determine the thermoplasticity alkene homopolymer on said layer (a) or the suitable dimension card softening point of copolymer through limited experiment, and its technical effect can be expected.

Consequently, technical solution that claim 1 was asked for protection, conspicuous to the those skilled in the art, therefore the technical solution that the said claim was asked for protection does not have prominent substantive features and a notable progress, therefore do not possess the inventiveness.

261. Mr. Gerstenzang's filing of the Information Disclosure Statement confirms that he knew that RU2182999C1 was material to the patentability of at least claim 1 of the '269 Patent. Upon information and belief, Mr. Gerstenzang, however, intentionally chose to improperly disclose RU2182999C1 in a manner that he reasonably expected would result in the USPTO not considering the reference. The manner in which Mr. Gerstenzang submitted the Information Disclosure Statement demonstrates that Mr. Gerstenzang attempted to avoid the reopening of prosecution of the '269 Patent while appearing to submit the prior art reference for consideration.

262. Russian Patent No. RU2182999C1 is not cumulative of any of the information of record considered by the examiner. None of the information considered by the examiner in the information of record within the '269 Patent discloses the inner tubular film having a five-layer sequence as claimed in independent claim 1. The examiner stated in the Reasons for Allowance that the specific five-layer sequence was "novel and nonobvious":

After a review of the prior art of record, it is believed that the present invention is novel and non-obvious wherein no reference discloses a tube comprising a layer sequence including at least one thermoplastic olefin homo- or copolymer, an adhesion promoter layer, an internally situated layer comprised of at least one homo and/ or copolyamide, a second adhesive-promoter layer and a layer of at least one homo and/ or copolyamide, as an external layer all in the form of a tubular film.

263. Russian Patent No. RU2182999C1 is material to the patentability of independent claim 1 because when combined with Jones the combination discloses and makes obvious at least claim 1 of the '269 Patent.

264. Upon information and belief, Mr. Gerstenzang intentionally chose to file the Information Disclosure Statement and Russian Patent No. RU2182999C1 in a manner that was not in compliance with 37 CFR § 1.97 and therefore would not be considered by the USPTO pursuant to 37 CFR § 1.97(i). Mr. Gerstenzang was able to avoid having Russian Patent No. RU2182999C1 considered by the USPTO examiner to determine the patentability of at least claim 1 of the '269 Patent while attempting to give the impression of not intentionally withholding Russian Patent No. RU2182999C1 from the USPTO.

265. But for Mr. Gerstenzang's deliberate choice of filing of the Information Disclosure Statement and Russian Patent No. RU2182999C1 in a manner that would not be considered by the USPTO, at least claim 1 of the '269 patent would not have been allowed by the USPTO.

266. The '269 Patent is invalid, void, or unenforceable for the above-said inequitable conduct during the prosecution of the '269 Patent by William C. Gerstenzang.

SEVENTH COUNTERCLAIM
(United Nations Convention of Contracts for the International Sale of Goods – Article 42 Breach)

267. Omega incorporates all preceding paragraphs of Omega's Counterclaims as if fully set forth herein.

268. Article 1 of the United Nations Convention on Contracts for the International Sale of Goods ("CISG") treaty provides that it "applies to contracts of sale of goods between parties whose places of business are in different States" when the states are contracting states under the CISG.

269. The United States and Germany are both contracting states under the CISG.

270. Omega initially contacted Buergofol in 2017 to purchase film products for use in UV CIPP liner products. As Omega explained to Buergofol the purchased films would be used in Omega's UV CIPP liner products for sale and use in the United States. Buergofol and Omega agreed to the purchase of film products as follows: (a) Omega would initially indicate the films it wanted to purchase; (b) Buergofol would then provide pricing for the films Omega indicated it wanted to purchase from Buergofol; and (c) Omega would then indicate its acceptance by issuing a purchase order to Buergofol identifying the amount of the film at the price previously provided by Buergofol. Buergofol also indicated that since the film products for use in UV CIPP liners products are costly to manufacture, it would manufacture and ship film products ordered by Omega once its received prepayment. Omega agreed to these terms and conditions. No other terms or conditions were required by Buergofol or Omega to consummate the sale of film products. For all purchases of film products from Buergofol, Omega never waived any warranties or rights under the CISG.

271. Omega agreed to the terms negotiated between the parties and further indicated its acceptance by ordering films from Buergofol verbally, by email or by purchase order to Buergofol, setting forth the price(s) for and the amounts(s) of the film products. Omega paid either a percentage of the cost of the order(s) or for the order(s) in full in advance once after receiving from Buergofol the cost of the order based on the prices in the purchase order.

272. Through multiple purchase order agreements, Buergofol sold film products to Omega such as inner film and outer film which Omega used in its UV CIPP liner products that were sold in the United States, and which Buergofol has accused of infringing the Patents-in-Suit. A true and correct copy of purchase orders produced by Buergofol (bates numbers BF4525-BF4537) are attached hereto as Exhibit I.

273. Each of the purchase order agreements for inner film and outer film between Buergofol and Omega are contracts of sale of goods between parties whose places of business are in different contracting States.

274. The CISG applies to each of the purchase order agreements of inner film and outer film from Buergofol.

275. Article 42 of the CISG provides: “(1) The seller must deliver goods which are free from any right or claim of a third party based on industrial property or other intellectual property, of which at the time of the conclusion of the contract the seller knew or could not have been unaware, provided that the right or claim is based on industrial property or other intellectual property; (a) under the law of the State where the goods will be resold or otherwise used, if it was contemplated by the parties at the time of the conclusion of the contract that the goods would be resold or otherwise used in that State; or (b) in any other case, under the law of the State where the buyer has his place of business.”

276. Article 42 of the CISG further provides: “The obligation of the seller under the preceding paragraph does not extend to cases where: at the time of the conclusion of the contract the buyer knew or could not have been unaware of the right or claim; or (b) the right or claim results from the seller’s compliance with technical drawings, designs, formulae or other such specifications furnished by the buyer.”

277. Pursuant to Article 42, paragraph 1 of the CISG, Buergofol warranted that the inner film provided under the purchase order agreements described above would be delivered to Omega free of any right or claim of any third party based upon industrial property or other intellectual property, such as patent infringement.

278. Prior to each delivery of film to Omega, Buergofol knew that Omega intended to use the film to manufacture UV CIPP liners in the United States.

279. Prior to each delivery of film to Omega, Buergofol knew that Omega intended to sell the manufactured UV CIPP liners with Buergofol's film in the United States.

280. Upon information and belief, at the time of Buergofol's sales and deliveries of film to Omega, Loparex owned the '269 Patent.

281. Prior to each delivery of film to Omega, Buergofol knew of the '269 Patent.

282. Prior to each delivery of film to Omega, Buergofol knew or could not have been unaware of Loparex's patent rights under the '269 Patent and/or that Omega's use of Buergofol's film as intended would expose Omega to claims of infringement of the '269 Patent.

283. Prior to each delivery of film to Omega, Buergofol knew of the '882 Patent.

284. Prior to each delivery of film to Omega, Buergofol knew or could not have been unaware of the rights under the '882 Patent and/or that Omega's use of Buergofol's film as intended would expose Omega to claims of infringement of the '882 Patent.

285. Buergofol alleges that Omega has infringed the '882 Patent by making, using, selling, and offering for sale in the United States UV CIPP liners that use Buergofol's film.

286. Buergofol, after acquiring Loparex's rights in the '269 Patent, including allegedly the right to bring claims for past infringement of the '269 Patent, alleges that Omega infringed the '269 Patent by making, using, selling, and offering for sale in the United States UV CIPP liners that use Buergofol's film.

287. The alleged patent infringement of the '269 Patent does not result from Buergofol's compliance with technical drawings, designs, formulae or other such specifications furnished by Omega.

288. The alleged patent infringement of the '882 Patent does not result from Buergofol's compliance with technical drawings, designs, formulae or other such specifications furnished by Omega.

289. At all relevant times, Omega did not know and was not aware of the '269 Patent or any claim of infringement under the '269 Patent.

290. At all relevant times, Omega did not know and was not aware of the '882 Patent or any claim of infringement under the '882 Patent.

291. Buergofol's sale and shipment of film to Omega breached the warranty Buergofol owed to Omega under Article 42 of the CISG.

292. Buergofol is liable to Omega for indemnification for all damages for breach of warranty pursuant to Article 74 of the CISG.

293. Buergofol's breach of the CISG warranty damaged Omega in amount to be determined at trial, which amount includes, but is not limited to, (a) all damages including consequential and incidental damages, including but not limited to damages to Omega's business, reputation, and goodwill, (b) all attorneys' fees, expert fees and costs in defending against the patent infringement allegations by Buergofol in this lawsuit and for Omega having to bring these counterclaims, (c) all attorneys' fees, expert fees and costs expended to challenge the validity and enforceability of the Patents-in-Suit in this lawsuit and/or in any proceedings before the United States Patent & Trademark Office, (d) any amount or other consideration that Omega paid to Buergofol or any other party as result of settlement or compromise of claims in Buergofol's First Amended Complaint, and (e) any other damages to which Omega is entitled to pursuant to Articles 74-76 of the CISG.

EXCEPTIONAL CASE (35 U.S.C. § 285)

294. This is an exceptional case entitling Omega to an award of its attorney's fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

OMEGA'S PRAYER FOR RELIEF

WHEREFORE, Omega requests judgment against Buergofol as follows:

- A. Dismissing Buergofol's First Amended Complaint against Omega with prejudice;
- B. Adjudging that Omega has not infringed, contributed to the infringement of, or induced others to infringe, either directly or indirectly, any valid and enforceable claim of the Patents-in-Suit;
- C. Adjudging that the Patents-in-Suit are invalid;
- D. Adjudging that the Patents-in-Suit are unenforceable;
- E. A judgment that Buergofol and each of its officers, directors, agents, counsel, servants, employees, and all of persons in active concert or participation with any of them, be restrained and enjoined from alleging, representing, or otherwise stating that Omega infringes any claims of the Patents-in-Suit or from instituting or initiating any action or proceeding alleging infringement of any claims of the Patents-in-Suit against any customers, manufacturers, users, importers, or sellers of Omega's UV CIPP liner products;
- F. Declaring Omega as the prevailing party and this case as exceptional, and awarding Omega its reasonable attorneys' fees, pursuant to 35 U.S.C. § 285;
- G. Adjudging that Buergofol breached the warranty under Article 42 of the CISG and must indemnify Omega for all damages for the breach of warranty pursuant to Article 74 of the CISG;

- H. Adjudging that Buergofol is liable to Omega for indemnification pursuant to Article 74 of the CISG, including, but not limited to, (a) all damages including consequential and incidental damages, including but not limited to damages to Omega's business, reputation, and goodwill, (b) all attorneys' fees, expert fees and costs in defending against the patent infringement allegations by Buergofol in this lawsuit and for Omega having to bring these counterclaims, (c) all attorneys' fees, expert fees and costs expended to challenge the validity and enforceability of the Patents-in-Suit in this lawsuit and/or in any proceedings before the United States Patent & Trademark Office, (d) any amount or other consideration that Omega paid to Buergofol or any other party as result of settlement or compromise of claims in Buergofol's First Amended Complaint, and (e) any other damages to which Omega is entitled to pursuant to Articles 74-76 of the CISG;
- I. That Buergofol be ordered to pay all fees, expenses, and costs associated with this action including Omega's reasonable costs and expenses of litigation, including attorneys' fees and expert witness fees;
- J. Awarding Omega its excess costs, expenses and attorneys' fees reasonably incurred pursuant to 35 U.S.C. § 1927;
- K. For pre-judgment and post-judgment interest;
- L. Such other and further relief as this Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Fed. R. Civ. P. 38(b), Omega demands a trial by jury on all issues so triable.

Dated this 26th day of July, 2024.

DENEVAN FALON JOYCE Prof. LLC

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